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BUSINESS WEEK



Sen. Fulbright (far right) at work with staff of his investigating committee

A McGRAW HILL PUBLICATION

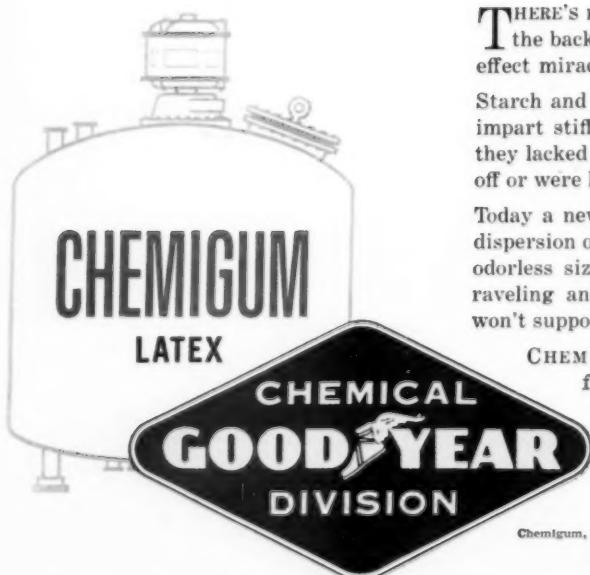
MAR. 12, 1955

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Photo Courtesy Mohawk Carpet Mills, Inc., Amsterdam, N.Y.

It puts magic in carpets



THERE'S more than meets the eye in top quality carpets. For instance, the backsize—a film-forming solution applied to the side unseen—can effect miracles in appearance and performance.

Starch and its derivatives were first used in sizes to bind the yarns, to impart stiffness, to increase weight and to dress down fuzziness. But they lacked strength, flexibility and permanence—embrittled and dusted off or were lost in cleaning. They also invited mildew.

Today a new wonder worker is in use—CHEMIGUM LATEX—an aqueous dispersion of a nitrile or oil-resistant rubber. CHEMIGUM LATEX permits odorless sizes that are strong and permanently flexible—that prevent raveling and skidding—that resist scrubbing and dry cleaning—that won't support mildew.

CHEMIGUM LATEX also permits chemical sorcery in sizes and finishes for a range of textiles, papers and leathers. For details, write to:

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CHEMIGUM, PLIOBOND, PLIOLITE, PLIO-TUF, PLIOVIC—T. M.'s The Goodyear Tire & Rubber Company, Akron, Ohio

The Finest Chemicals for Industry

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"It's all right...
*there's a telephone
right here, too"*

The man who has a telephone at his elbow in the office appreciates the same convenience in his home.

He knows that running down stairs or from room to room to telephone is an unnecessary waste of time and energy . . . when additional telephones, conveniently placed, cost so little.

Great thing for Mother, too. For telephones in the kitchen and bedroom will save her many steps. And give her greater peace of mind, especially at night when she may be at home alone.

All of this convenience—and safety too—can be yours at small cost for each additional telephone. Just call the business office of your local Bell telephone company.

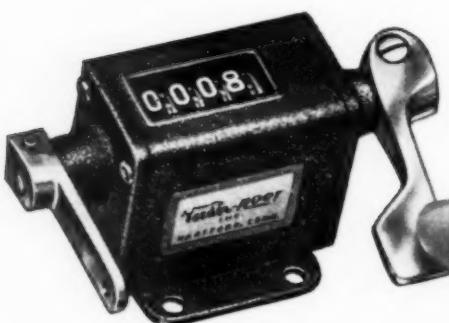
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SERVICE THAT'S WORTH SO MUCH...COSTS SO LITTLE

Quick Lever

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Speeds Work**

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that—

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VEEDER-ROOT**

Where time consumed in resetting is at a premium . . . on short machine-runs, inspection, military equipment and other applications . . . this new time-tested Quick-Reset Ratchet Counter is exactly the time-saving device you need. Just depress the easy-acting lever on the right side through 45° . . . all 4 figures reset instantly to zeros. And a thumb-lever may be used on the left side also if the counter is to be

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This compact, standard counter, now readily available from stock, is one of scores of Veeder-Root Counters (both standard and special) for manual, mechanical and electrical operation in every field from electronics to atomics. Just name what you want to count . . . and "The Name that Counts" will help you do the job. Write:

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BUSINESS WEEK

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BUSINESS WEEK • Mar. 12, 1955



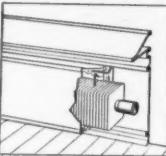
Green Ridge Park, Dalton, Mass., a suburb of Pittsfield, where prefabricated Ford Homes have custom heating comfort with Webster Baseboard Heating. Builder: Mazur Brothers. Heating Contractor: John P. Cetti. Webster Equipment supplied by: Carr Supply — all of Pittsfield, Mass.

"Prefab" buyers like LOW FUEL COST New Comfort Heating

Five hundred of these prefabricated Ford homes will make up the completed development at Green Ridge Park. Prices start at \$10,990, with Webster Tru-Perimeter Forced Hot Water Baseboard Heating.

Says Builder John E. Mazur, "The low fuel cost of Webster Baseboard Heating plus its ease of installation makes an unbeatable combination for any operative builder."

Home owners at Green Ridge Park get clean, quiet, gentle, draft-free heat. No loss of floor or wall space.



Cut-away view of Webster Tru-Perimeter Forced Hot Water Baseboard Heating. Note its simplicity.

Prefabricated or custom-built, every house is more salable with the low fuel cost and high-comfort level of Tru-Perimeter Webster Baseboard Heating. Send for folder, "Wonderful Webster Baseboard Heating."

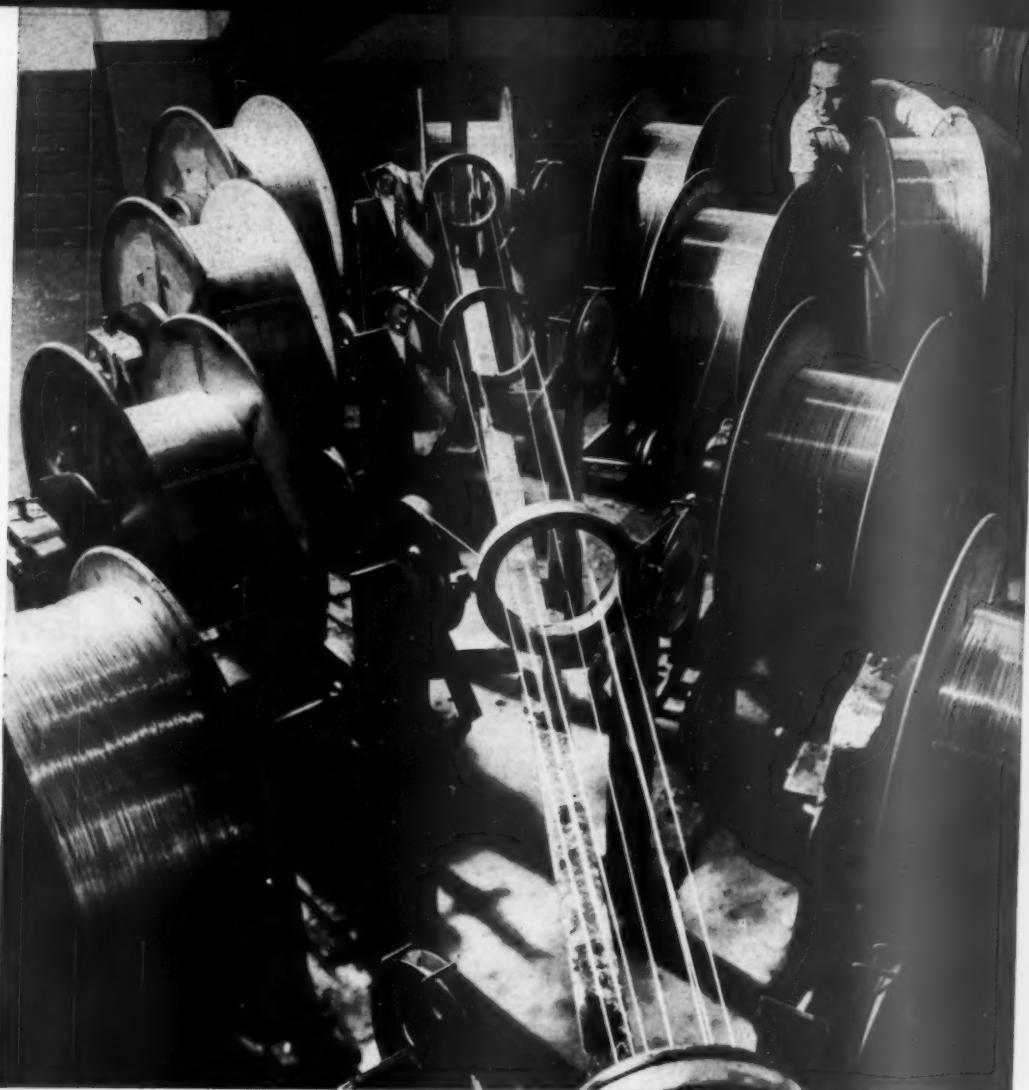
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WARREN WEBSTER & CO.

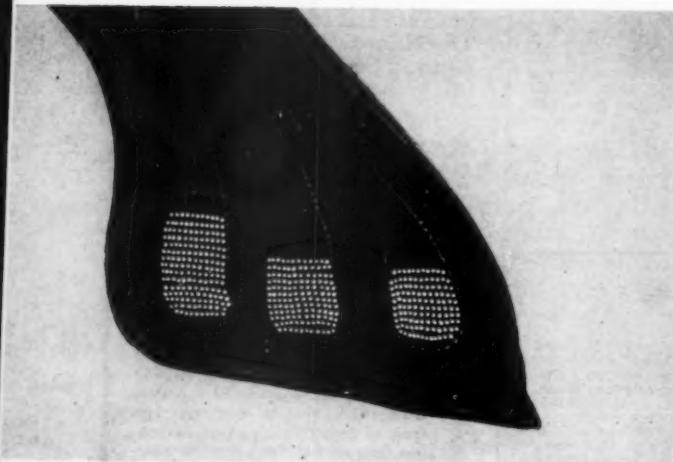
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Heating; Convectors; Steam Heating
Specialties for heating and process
applications; Webster Moderator Sys-
tem of Steam Heating and continu-
ous flow controls for hot water heating — both with outdoor thermostat;
Unit Heaters. Data on request.



1. Steel Wire feeds smoothly into a bead building machine. The parallel wires are insulated with rubber to avoid wear between the wires, then wound into layers that build up into an engineered tire bead design.



2. Tire Beads for tires on heavy earth moving equipment are like those on your automobile, although they contain more wires for carrying heavier loads.



3. Becoming an Integral Part, the beads are first wrapped into a unit and positioned in the tire carcass, then built into the structure of the tire.

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4. Samples Are Tested to make certain wire meets requirements for tire beads. Here the bronze coated wires are being tested under tension for proper adherence to rubber.



5. One of World's Largest Tires, made by Firestone for U. S. Army "Barc," is 9½ in dia., weighs 2,952 lbs. Tire is built to carry 60,000 lbs.

The Secret Strength of Tires

When they talk about "beads" in the tire industry, they don't mean ladies' jewelry. They're talking about the tough steel wires that anchor a tire to its rim.

Whether you're driving an automobile, an airplane, giant earth-moving equipment or anything that rolls on pneumatic tires, you are counting on the hidden bead wires to take up the full force of the load in starting, stopping or roaring across country. Tire beads transmit the load from the steel rim of the wheel.

If the cord body of your tire is damaged, you can have it fixed. But if the vital bead wires are broken, they can't be repaired. You have to replace the tire. So you are depending on tire bead wire to perform for you, and tire manufacturers insist on the best to do the job.

• **Design For Strength**—Busily producing thousands of tons of this wire going into tires made by every major tire manufacturer in the country are the experts of Johnson Steel and Wire Company. At Firestone Tire and Rubber Company, for example, their wire is going into some 60 different types of tires rolling off production lines by the millions every year.

It isn't ordinary wire. It is a special high carbon steel wire only 0.037 inch in diameter . . . so small that it takes about 274 feet of it to weigh a pound. Yet a single strand of this wire has a minimum breaking weight of over 285 pounds, equivalent to a tensile strength of approximately 270,000 pounds minimum per square inch. It has special requirements for torsion, elongation and straightness. In addition, it has a clean bronze plate finish so that the rubber in the tire will adhere to it.

Wires feeding into Firestone's bead building machines lie parallel, from three to twelve wires wide, depending on the engineered design of the bead.

As they move rapidly through the machines, rubber completely encases them so that there will be no mechanical friction between wires.

Strands of coated wire come out of these machines looking much like a black tape. The tape is wound one turn on top of another until the bead reaches the required depth. Then it is wrapped with various types of fabric until it becomes a unit ready to be built into the structure of the tire.

• **Built To Take It**—The bead for a motor scooter tire is only three wires wide and three turns deep, giving you a bead containing a total of nine wires. Your automobile tire may have a six-by-five wire bead with a total of 30 wires. And, of course, there is one bead on each side of the tire. Air pressure inside the tire assures a snug fit of the bead against the rim.

Airplane tires have beads specially built for shock loading, as the tires must take the load of the plane and accelerate from motionless to rolling speeds of almost 200 miles per hour. These tires have up to three beads on each side, containing a total of nearly 500 wires per side and providing a breaking strength of over 140,000 pounds.

One of the largest tires in the world, built by Firestone for the U. S. Army "Barc," is 9½ feet in diameter. It weighs a ton and a half and its beads contain over 1,200 wires per side, giving a breaking strength of over 340,000 pounds.

• **Let 'Em Roll**—With the advent of the new tubeless tire, the use of tire bead wire and its importance to the tire industry are continuing to develop. Its uniform strength and rigidity offer ease and speed in manufacturing. Its adaptability to the necessary bead shapes through combination of strands gives the tire industry flexibility in design.

That's why you'll find Johnson Steel and Wire's tire bead wire used by Firestone and all the other blue-chip tire manufacturers.

If you use fine wire specialties, why not look into the opportunities Johnson Steel and Wire offers you. Its range includes aircraft cord wire, armature binding wire, wire for brushes, metal stitching, hose reinforcement, stapling wire, hobby pin wire, rope wire, oil tempered and MB hard drawn spring wire, and music spring wire right down to sizes as fine as a human hair. Why not call today. You can count on prompt personal service!

Johnson Steel & Wire Company, Inc.

Worcester 1, Massachusetts

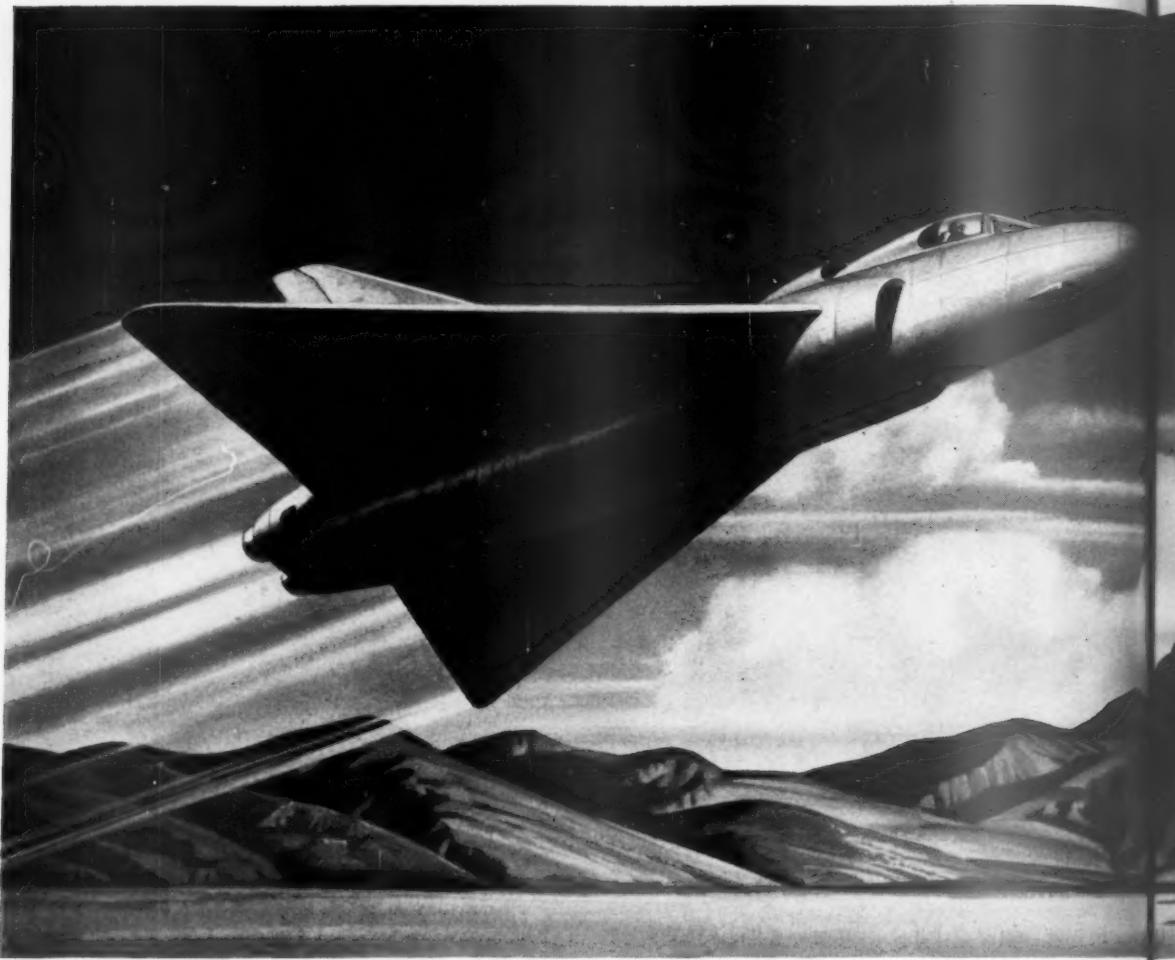
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FROM THE "SPIRIT OF ST. LOUIS"



TO J AND GU

Bendix Has Helped American Aviation Lead Solutions to Fuel Metering and Engine Cont

WHEN anything moves as fast as aviation has since Lindbergh's famous flight, a special brand of creative engineering is required to successfully anticipate the industry's needs.

You can't just design a fine carburetor and rest on your oars, because somebody will come up with a different or more powerful engine that needs a new carburetion approach.

You can't even confine your thinking to carburetors, because DC-7s, Super Constellations and B-36 bombers require something entirely different. And unless your ingenuity has produced an answer like the Bendix* direct fuel injection system, you are out of the ball game.

And then, of course, they're liable to throw away

the script and heave you the jet-engine curve violations and can't touch with either carburetors or direct injection.

The jet is absolutely no kin to the piston-type. Maybe engine. It's a super-powerful, sensitive creation that we make. We make gave pilots many, many problems until Bendix brought out a completely automatic system of fuel metering and engine control. It has been so successful that these efficient Bendix fuel metering and engine control systems are standard equipment on a great majority of modern jet engines. And going further, Bendix fuel metering controls do an excellent job on guided missiles.

A quick review shows how Bendix ingenuity and leadership in this field pays off—Bendix carburetors are on DC-3s, DC-4s, DC-6s, Convairs and Martin direct injection systems are on DC-7s, Super Consta

BENDIX

Fisher



TO JET AND GUIDED MISSILES

Lead the World with Important ing Control Problems!

curve solutions and B-36s; fuel metering and engine control systems injection on our most advanced military jet and turboprop engines. ston-type. Maybe Bendix ingenuity can lick some of your problems. We make about a thousand different products for all kinds brought of industries, many of them radically new answers that cut costs and increase efficiency. They are listed in our book "Bendix and Your Business" which will be mailed on request.

ENGINEERS: Want room to develop ideas? Find out what America's most diverse business has to offer. Write for "Bendix and Your Future."

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automotive brakes, carburetors, power steering; aviation brakes, landing gear, fuel metering.

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bicycle coaster brakes, Stromberg* carburetors, electric fuel pumps, starter drives.

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automotive, marine and small engine carburetors.

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meteorological instruments, precision instruments and recorders.

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*REG. U. S. PAT. OFF.

READERS REPORT

Vitamins—Plus

Dear Sir:

Your February 12'55 issue [p174] contains a very interesting and well prepared article on vitamins. . . . Our heartiest congratulations to the author for an excellent article and our compliments to BUSINESS WEEK for this fine public service.

JOHN E. McKEEN

PRESIDENT

CHAS. PFIZER & CO., INC.
BROOKLYN, N. Y.

Dear Sir:

. . . We were very interested in your article on vitamins, minerals and the diet [BW—Jan. 8'55, p115—Personal Business].

This is timely information for all, and we were very pleased to see the up-to-date presentation by the widely read publication BUSINESS WEEK. The progress of the role of vitamins and minerals in nutrition is encouraging . . . [and] I believe we will be amazed at the strides which will be made in the next few years.

THOS. J. WINN

PRESIDENT

J. B. ROERIG & COMPANY
CHICAGO, ILLINOIS

Printed Circuits? Yes!

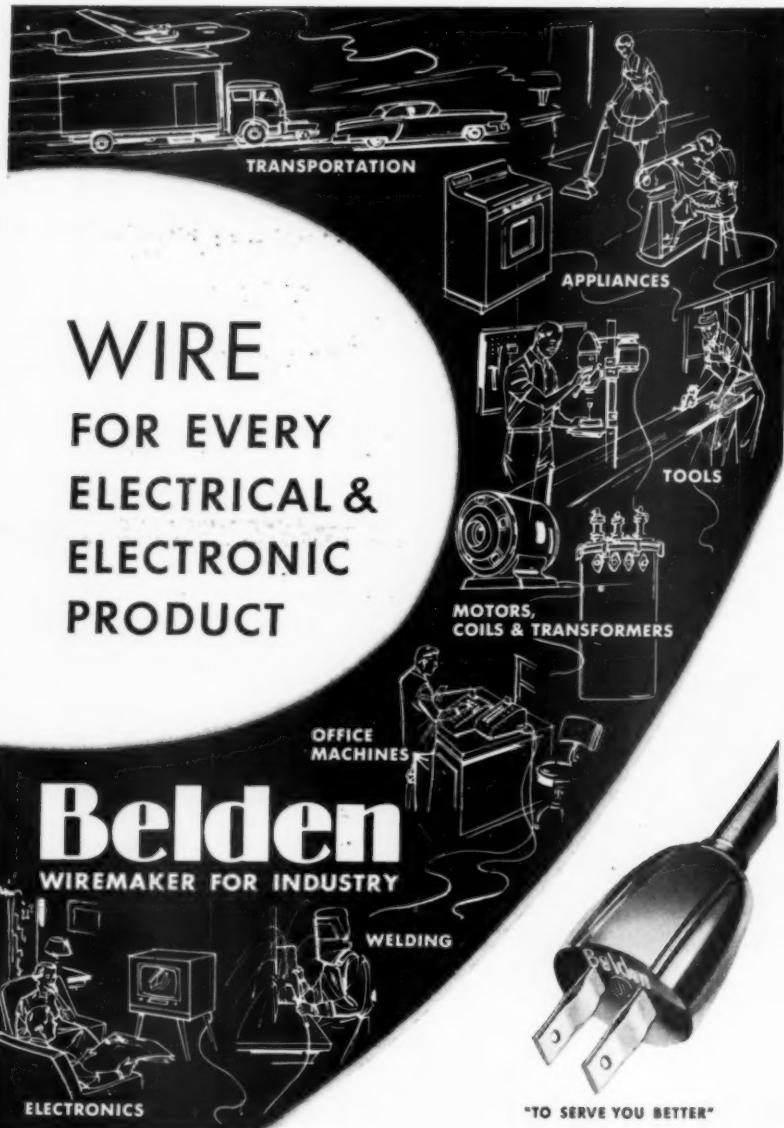
Dear Sir:

We would like to call your attention to a recent item . . . which referred to the 1956 model six-million Ford auto radio [BW—Feb. 5'55, p86].

On February 2, when the two-million Ford receiver made by Bendix Radio was presented to officials of the Ford Division, announcement was made that 1956 models would incorporate the printed circuit technique, whereby circuits are photo etched on a metal and plastic board. Following this, your magazine erroneously reported that transistors would be used in these sets, causing a great deal of amazement within the industry and among editors of electronic magazines.

Of course, the choice of the word "transistors" could not have been more unfortunate. The public has been educated to expect great things from transistors, although their final role is not yet established in certain products.

The confusion in terms has there-



The purchase price represents only the starting point in figuring the over-all costs of electrical cords. Add to that: receiving inspection costs—assembly costs—line inspection costs—and the costs of failures in service. The total is the real cost of cords.

If you think in terms of *actual* over-all profit—it will pay you to do business with Belden.

Save Time, Save Money—Specify Belden.

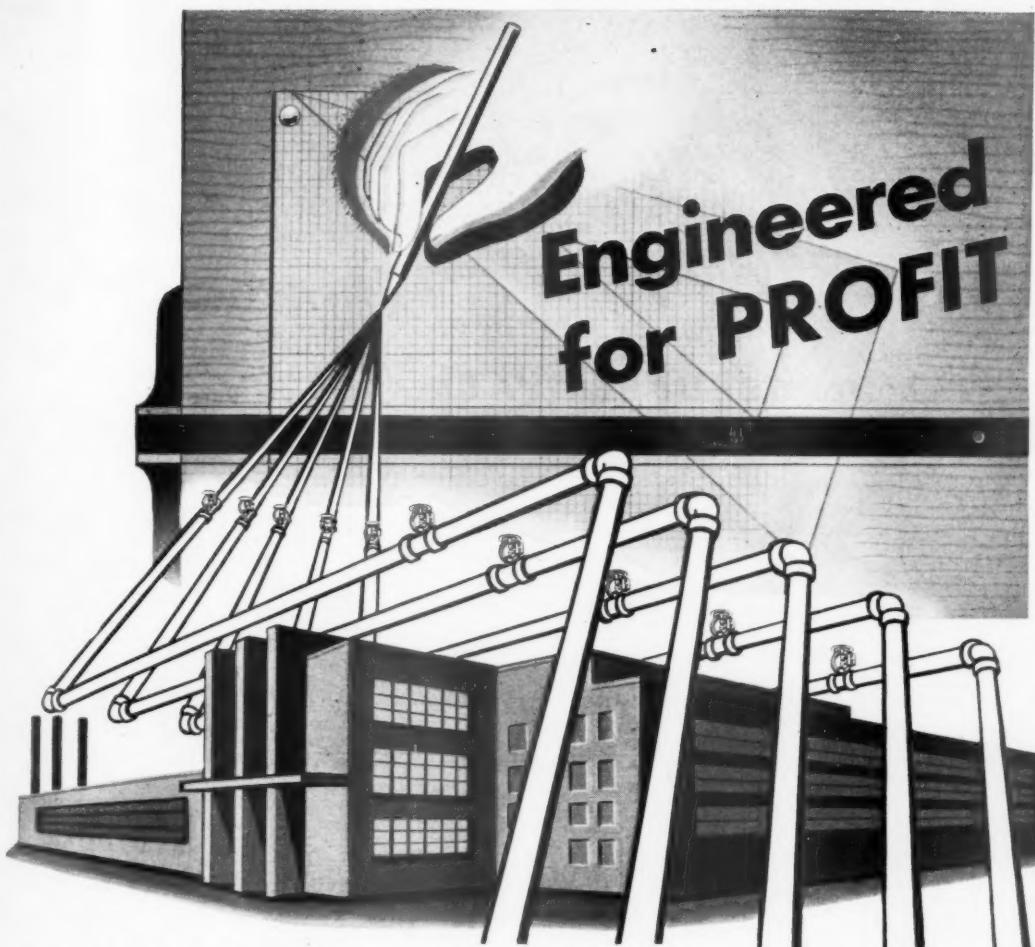
Belden Manufacturing Co. • 4689-A W. Van Buren St., Chicago 44, Ill.

MANUFACTURERS WHOSE PRODUCTS SERVE BEST...

Specify

Belden

WIREDMAKER FOR INDUSTRY



If you, like most businessmen, are seeking a steady PROFIT builder for your business, you'll find that ENGINEERED "Automatic" Sprinkler FIRE PROTECTION is the answer.

It's an investment that returns substantial dividends whether you ever have a fire or not.

Let us show you how!



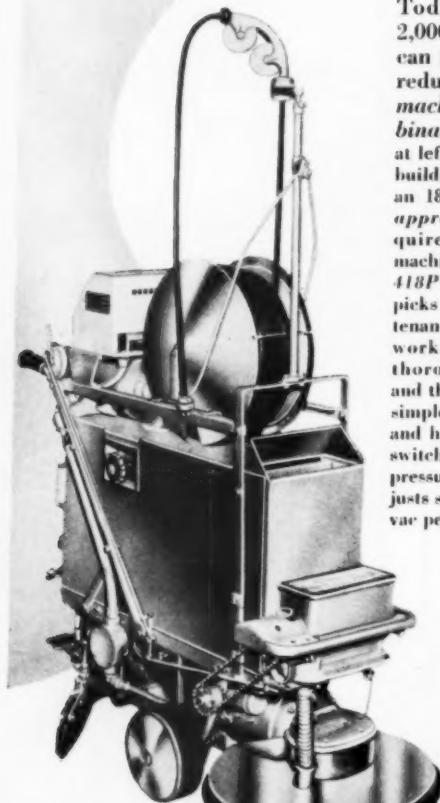
What's worth insuring
is worth protecting!

SMALL-AREA BUILDINGS...

Save $\frac{2}{3}$ of Every Hour of Scrubbing Time

WITH A

COMBINATION SCRUBBER-VAC!



...Also can be used
for dry work—steel-
wooling, et cetera

Today, even buildings with but 2,000 to 15,000 sq. ft. of floor space can reap the labor-saving, cost-reducing benefits of combination-machine-scrubbing. Here's a Combination Scrubber-Vac, Model 418P at left, that's specially designed for such buildings. This Scrubber-Vac, which has an 18-inch brush ring, cleans floors in approximately one-third the time required with a conventional 18-inch machine and separate vac unit. Model 418P applies the cleanser, scrubs, and picks up—all in one operation! Maintenance men like the convenience of working with this single unit...the thoroughness with which it cleans...and the features that make the machine simple to operate. It's self-propelled, and has a positive clutch. There are no switches to set for fast or slow—slight pressure of the hand on clutch lever adjusts speed to desired rate. The powerful vac performs efficiently and quietly.

Finnell makes Scrubber-Vac Machines for small, vast, and intermediate operations, and in self-powered as well as electric models. From this complete line, you can choose the size and model that's exactly right for your job. It's also good to know that you can lease or purchase a Scrubber-Vac. For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 3803 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

FINNELL SYSTEM, INC.

Originators of
Power Scrubbing and Polishing Machines



BRANCHES
IN ALL
PRINCIPAL
CITIES

fore resulted in embarrassment in our relations with the Ford Motor Company and we have had to explain that no such information was released by us.

We fully realize how difficult it is to completely eliminate mistakes such as these—even in a magazine as carefully prepared as yours. We know that it is even more difficult to rectify errors of one or two words, once they have appeared in print. However, we sincerely hope that you will have an early opportunity to clear up this misconception. . . .

W. E. CLEAVES

GENERAL SALES MANAGER
BENDIX RADIO, DIVISION OF
BENDIX AVIATION CORP.
BALTIMORE, MARYLAND

• Of course, we were wrong. But we are so enthused about transistors, we mention them every chance we get. This time our enthusiasm threw us for a loss.

How Big?

Dear Sir:

I've read with a great deal of interest your editorial "How Big: New Answer, and New Attack" in your February 12 '55 issue [p86].

Obviously, one of our really serious national problems is to solve the future relationship between big and small business. This is one challenge that the business world must solve if we are to continue to enjoy the fruits of the free enterprise system. . . .

. . . The more you see of mergers and diversification, the more you realize that the final answer is a question of the ability of the management.

. . . The larger companies, who for the most part have grown big by acquisitions, mergers and wars, are fully aware of this problem, and are taking steps to convert headquarters into management consulting services.

. . . This is [not] the final answer, but it is certainly one step along the road.

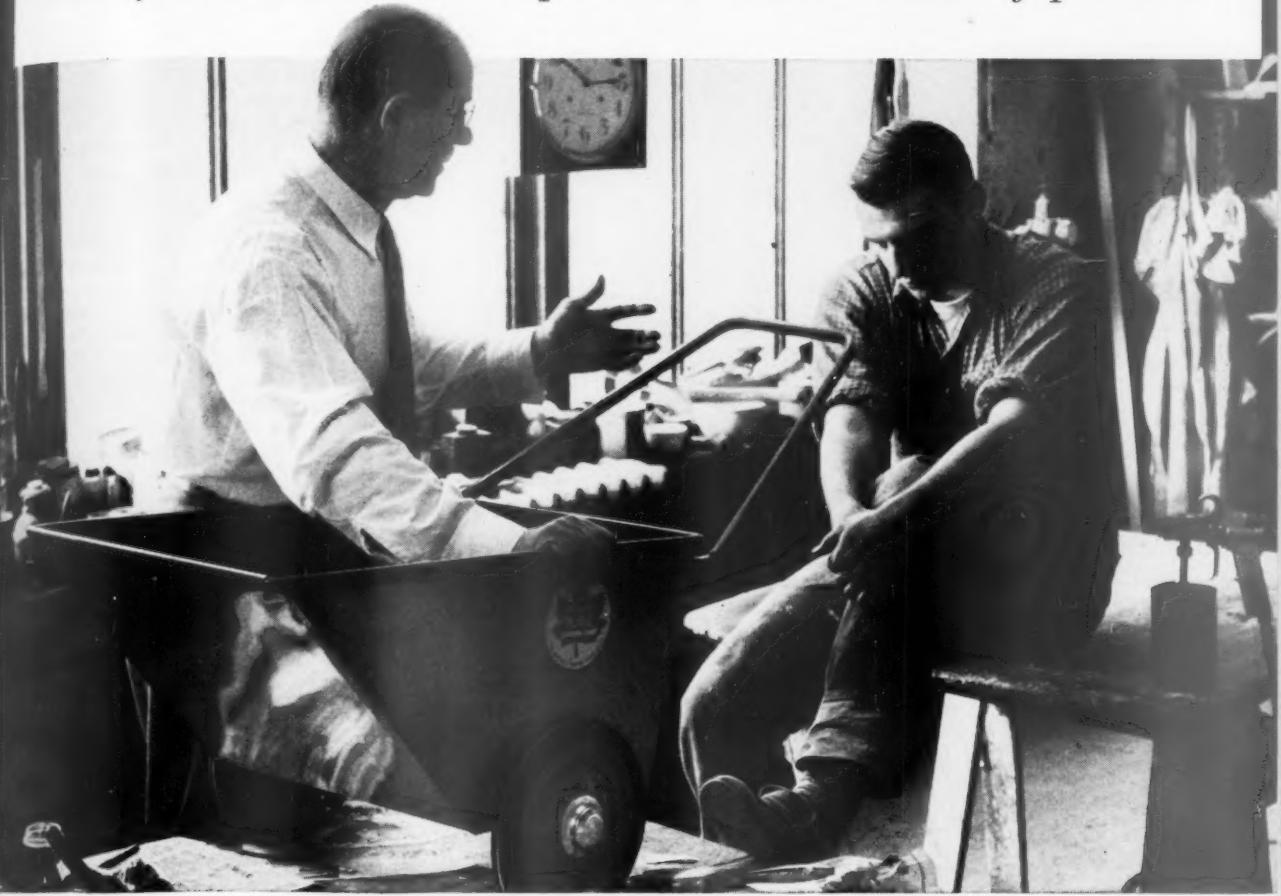
EDWARD MCSWEENEY
TREASURER
PERKINS-GOODWIN PAPER CO.
NEW YORK, N. Y.

Natural Gas Prices

Dear Sir:

I agree "Industry Can Do it Better" [BW—Jan. 15 '55, p76]. Your editorial is most convincing. Federal regulation of the price paid for natural gas is certainly socialistic

"Why did it cost \$2⁷⁶ to put on a dime's worth of paint?"



Talk fast, mister! . . . Don't worry, the foreman will—with plenty of explanations. But afterward he'll take steps to cut painting costs back to where they should be. And keep 'em there.

Who's the hero of this drama? Keysort punched-card accounting. The boss learned through Keysort operation costing that things were getting out of hand in the Finishing Department. On certain operations the figures were far higher than last week's. Knowing the score—and knowing it *on time*—the boss could move quickly

to bring his cost picture back into focus.

Moral: a McBee Keysort installation can give you comprehensive, accurate reports on every phase of factory operation, and give them to you *fast*. On your desk by the 4th of each month. Important interim figures weekly, or even daily. Whether yours is a 100-man payroll or a colossus supplying the whole country. The cost? Surprisingly low.

There's a trained McBee representative near you. He'll be glad to show you how it's done. Or write us.

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Punched-card accounting for any business

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The washing machine that travels first class *... at lower cost!*

Even with outmoded "cheap" shipping treatment it was costing too much to pack and load and handle this easily damaged unit. Its manufacturer recognized his problem, challenged Fort Wayne to solve it. Which we did. A specially designed corrugated container now saves packing time and money, protects the product all the way in every way, reduces tare weight, shipping weight and over-all shipping costs—including damage claims! Corrugated is versatile that way—and so is Fort Wayne.

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CORRUGATED PAPER COMPANY
GENERAL OFFICES • FORT WAYNE 1, INDIANA
Corrugated Fibre Boxes • Corrugated Paper Products



and if left unchallenged, it will spread to other commodities.

F. C. FELLINGHAM
OKLAHOMA CITY, OKLAHOMA

An Architect Speaks

Dear Sir:

I have just read with much interest your "Personal Business" page [Feb. 1955, p. 179].

On behalf of the architectural profession, may I express my sincere appreciation for a good job well done. It is always difficult for the architect to get the story of his profession over to laymen and articles of this sort do more for both the architect and his client than anything else . . . thank you for a very fine piece of editorial work.

R. GRAHAM JACKSON
WIRTZ, CALHOUN, TUNGATE &
JACKSON
HOUSTON, TEXAS

California Trouble

Dear Sir:

The story in the Feb. 5 '55 issue [p. 31] on the U. S. Steel flurry on the floor of the Exchange is a fine piece of reporting and very interesting. One point though: As one who has worked in San Francisco for many years, I can assure you that *nothing* galls a true San Franciscan quite as much as having his beloved city referred to as Frisco. No joking. They just don't like it at all.

RICHARD H. WADDELL
WADDELL & REED, INC.
NEW YORK, N. Y.

Dear Sir:

. . . For years we have been striving against tough odds but with a gratifying measure of success to overcome the handicap . . . of San Francisco's . . . traditional, but now debatable, dominant position on the Pacific Coast. But, we never expected the editors of BUSINESS WEEK to be influenced by and perpetuate such a questionable concept.

Your story "Big Board's Biggest Deal" [BW—Feb. 5 '55, p. 31] is the cause of our concern. From a news coverage standpoint your editors neglected . . . the activity in Big Steel on the Los Angeles Stock Exchange which was comparable to that in San Francisco. Such neglect would appear to reflect editorial acceptance of San Francisco's traditional dominance, rather than an intentional disregard of Los Angeles. Unfortunately, however, its effect unquestionably fostered the San Francisco tradition in



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The power of veto is delegated to many people at Inland, any one of whom can turn thumbs down on our steel, somewhere along the line, if it isn't right for your job. Take cold rolled sheets, for example. Inland encourages this negative attitude on the part of the individuals in this photo, who are concerned with quality control at various stages of steel production. Their vigilance assures you of uniformly good quality steel, order after order, year after year.

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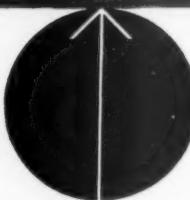
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Pound for pound, lightweight MICARTA offers compressive strength greater than that of structural steel. It is a tough and resilient basic material . . . a solid, yet workable plastic. MICARTA soaks up impact and vibration. It swallows sound. It resists moisture and corrosion. Where can this wondrous material solve a problem for you? Use the coupon for the complete story.

J-06581

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In the Marine Industry MICARTA is serving in applications like propeller shaft bearings, pump rings and pinion bushings.



Westinghouse Electric Corporation, Trafford, Pa.
MICARTA Division, Attention: L. A. Pedley

Sir: (Please check one)

- Please have your representative call
 Please send me complete facts
on MICARTA

Name _____

Company _____

Address _____

City _____ Zone _____ State _____

BW-3-12-55

the minds of your readers and thereby added to our problem of overcoming it.

W. G. PAUL

LOS ANGELES STOCK EXCHANGE
LOS ANGELES, CALIFORNIA

• Our managing editor and one associate managing editor are Californians. They bow their heads in shame.

Different Division

Dear Sir:

I would like to point out [in] the January 29'55 BUSINESS WEEK article [p46] on the oxygen process of steel making . . . you list Kaiser Engineers as a division of Kaiser Motors. Nothing could be further from the truth. Kaiser Engineers Division of Henry J. Kaiser Co. is the corporate title of [the] firm.

CHANDLER P. YOUNG

HENRY J. KAISER CO.
OAKLAND, CALIFORNIA

Splits & Fifths

Dear Sir:

Your story about the market effect of stock splitting [BW—Feb. 12'55,p31] reminds me of the views on that subject held by Dr. Willard Graham . . .

That practical, scholarly gentleman headed the Executive Program of the University of Chicago, an adult education course leading to an M.B.A. degree. He used to illustrate the operation of stock-splitting with this homely comparison:

"Let us say that a company wishes to offer a 1-to-4 stock dividend. That would be equivalent to taking 4-quart bottles of whiskey and pouring the contents into 5 bottles so each will hold one-fifth. When you have completed the operation you will have the same amount of whiskey, less a few drops that you have slopped over the sides (that's the legal and clerical expense), but one of the new bottles takes up less room in your bag."

I have forgotten most of the laws of economics that we studied but never the whiskey-pouring.

ROBERT T. HERZ

DALLAS, TEXAS

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.



TOOTHSOME—AND THEN SOME!

Dental science . . . with important help from chemistry . . . keeps developing methods for improving the pleasant taste, cleansing qualities and protective characteristics of the toothpaste you use. And one of the ingredients that is an important constituent of toothpaste today is Atlas sorbitol. It helps keep the dentifrice soft, even when the cap is left off the tube . . . adds agreeable body and smooth texture . . . is compatible with the newest anti-decay ingredients.

Sorbitol and other Atlas organic chemicals are providing profitable advantages—usually unseen—in the products you buy and use daily for your home, farm or factory. Perhaps Atlas can help to make marked—and marketable—improvements in the things you manufacture. Atlas Powder Company, Wilmington 99, Delaware.

**ATLAS**
POWDER COMPANY

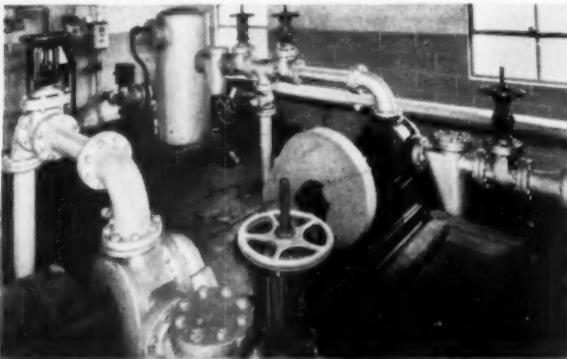
SORBITOL, EMULSIFIERS, DETERGENTS
POLYESTER RESINS, PAINTS, EXPLOSIVES
ACTIVATED CARBONS, LAUNDRY COVERS



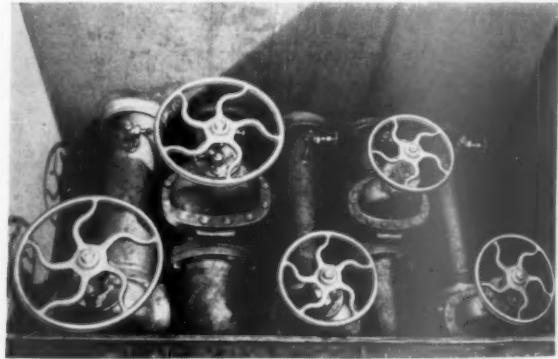
You do it better now—with CRANE VALVES' help

The covered wagon gave way to the "iron horse" because steam had come under man's control—control with valves. Today you travel by diesel or electric road, by water or air, dependent on valves for a thousand controls. For today, control of water, steam, oil, gas and other fluids is basic to all industries.

By rigid adherence to quality through a century of manufacturing, Crane valves have earned the reputation for assuring better flow control with lower piping maintenance cost. They're the first choice of thrifty buyers—that's why more Crane valves are used than any other make.



"PAYING ITS OWN FREIGHT"—More than 5 years ago, The Cincinnati Union Terminal Railroad built this diesel fueling system with Crane valves and fittings: Recently they reported: operation entirely satisfactory; piping maintenance cost to date—zero. That's typical Crane quality—serving all transportation industries with complete lines of brass, iron, steel and alloy piping materials.



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CRANE'S FIRST CENTURY...1855-1955



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PAGE 1

BUSINESS OUTLOOK

BUSINESS WEEK
MAR. 12, 1955



This is going to be a big month—maybe the biggest on record—for both steel and automobiles. And it might be borne in mind that the month will cap an extraordinarily fine first quarter.

—•—
Auto companies already are running at a record-breaking rate.

All they have to do is hold it for March output to hit 725,000 cars. Even 750,000 would be no surprise.

Up to now, the best one-month mark was 721,000 in June, 1950.

Breaking the quarter's record is no problem at all in autos.

The best mark for the first three months of any year is barely over 1.6-million. This year's will comfortably top 2-million and probably will come very close to 2.1-million.

The only past quarters that even come close would be the second and third in 1950 with 1,750,000 and 1,895,000, respectively.

Retail sales records also are falling right and left as the auto industry races along (page 28). First quarter registrations this year should top 1.6-million, 200,000 ahead of any initial three months in the past.

Comparison of these estimates on new-car output and registrations reveals at a glance that inventories have been rising pretty rapidly.

Even after liberal allowance for exports and sales of cars that aren't registered, it seems that dealers will have increased stocks on hand or in transit by nearly 400,000 between Jan. 1 and Mar. 31.

If they had 350,000 Jan. 1, as industry sources have estimated, Apr. 1 inventory will be the largest for this or any other time of year.

This may not be high, though, considering the chance of strikes.

Look for April and May to be among the biggest sales months the auto industry has ever had. Whether the strikes come off or not, the threat will be enough to bring in the customers in flocks.

May could, in fact, rival the 600,000-plus months in the summer of 1950—but not without affecting sales all the rest of the model year.

—•—
New records will take a bit more of a push in steel than in autos.

March would have to average about 95% of capacity to wipe out the high of 10,169,000 tons set this month two years ago. That involves an average 2½ points better than this week's scheduled rate of output.

It's worth noting, though, that we can turn out so much steel at 95% of capacity now whereas the industry had to run close to 102% in order to do it two years back. That's how much capacity has grown.

Steelmakers, in trying to squeeze out a few thousand more tons of metal a week, undoubtedly are facing up to cost problems.

For example, some of the facilities they will have to use doubtless are not too economical. When output was 20% to 30% below today's level,

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

MAR. 12, 1955

some of the excess capacity was talked of as "defense standby."

The implication was that, in calmer times, quite a sizable chunk of present capacity could be written off as obsolete.

Now, with defense needs unaltered, things look quite different.

Another factor affecting steel costs (and long before next fall's wage negotiations) is the price of scrap.

Quotations had moved rather narrowly and somewhat erratically ever since the jump last September and October. But they've threatened to break loose these last few days.

To combat the scrap rise, mills are stoking the blast furnaces. U.S. Steel this week rekindled one that had been down for exactly a year.

—•—
Consumers will increase their instalment borrowings quite sharply before midyear if auto sales go as now appears likely.

Take the first half of 1953 for purposes of comparison. Instalment paper to finance auto sales rose by more than \$1½-billion in that period—and we'll sell a lot more cars this year.

—•—
January marked the kickoff. With auto sales up by about half, instalment paper rose \$63-million; last year it went down \$183-million.

—•—
Use of credit by consumers, aside from autos, has been feeling the usual after-Christmas payoff. Charge accounts went down nearly \$300-million in January while most other types of credit dipped proportionately.

—•—
You are watching money market trends? If so, you might bear in mind some such combination of factors as this:

- Business borrowings have declined less than seasonally so far this year (in sharp contrast to the deep slide early in 1954).
- Consumer borrowings in the half year will top repayments by something in the neighborhood of \$1-billion.
- Mortgage borrowing will need new money to the tune of between \$3-billion and \$4-billion.

—•—
Gradual tightening of the money market might bring higher interest rates on mortgages that aren't government guaranteed.

However, it's doubtful that even this would dent the housing boom at this stage. For one thing, a higher and higher percentage of all mortgages are guaranteed; for another, ½% on the annual interest won't deter buyers.

Builders certainly have no feeling that they're reaching saturation. Figures on (1) what has been done, and (2) is planned show that:

- Residential construction was the big factor in February's gain over a year ago in total value of work put in place.
- Contract awards for future home building last month ran 48% ahead of a year ago, according to F. W. Dodge Corp.'s monthly compilation.



DOES UNIVAC 120 REALLY THINK?

Many executives who use today's most advanced punched-card computer say . . . "Yes!"

Because . . . "It makes dozens of record-keeping decisions and calculations every second". . . "It figures out the complete story on our profit changes while the facts are still useful". . . "It simplifies and solves our

most complicated payroll, production and billing problems."

The Remington Rand Univac 120 actually *does* replace routine human thinking. Take time-keeping for example. Univac 120 arrives at pay hours while allowing for thousands of variations in shift time, pre- and post-shift time, lunch hours, etc.—checks its own computations—and flags obvious human recording errors.

Does Univac 120 eliminate intelligence? Certainly not. But it does free your skilled personnel for creative thinking. Wherever you pay for clerical chores that involve analyzing, classifying, making logical decisions, comparing and calculating . . . Univac 120 electronic methods will earn their way over and over in speed, accuracy and efficiency. Put it squarely up to us to show you *how and where*.

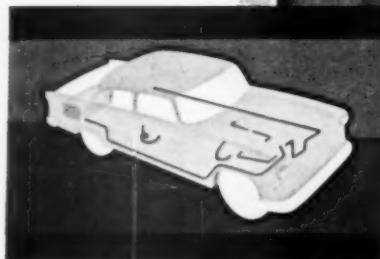
ROOM 1303, 315 FOURTH AVE., N.Y. 10

Remington Rand PUNCHED-CARD ELECTRONICS

MAIN

VEIN OF

MOTORING



GM STEEL TUBING BY **R**OCHESTER

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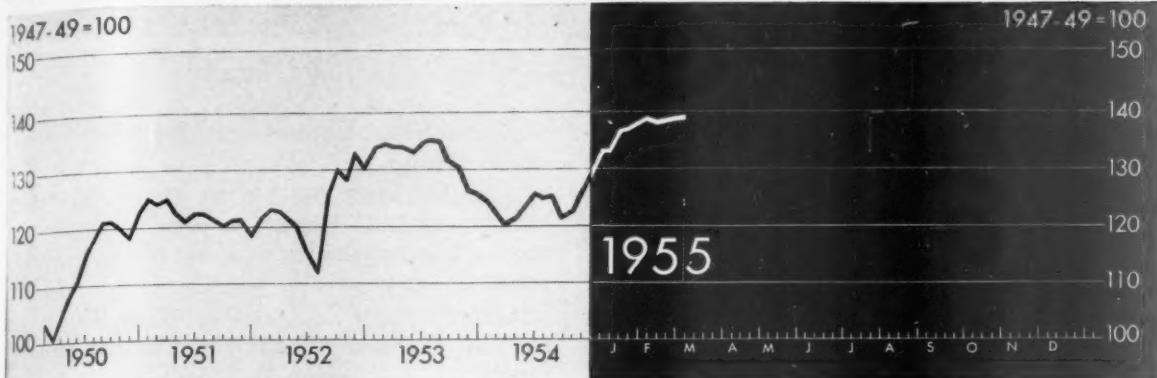
ROCHESTER
PRODUCTS

Cruising down the highway . . . crawling through traffic . . . coming to a smooth, sure stop! You may not be aware of it, but steel tubing is playing a big part. Gas, oil, water, brake fluid . . . the lifeblood of your car . . . flow through a network of steel. When you step on the gas or brake pedal, *steel tubing* carries out your orders to stop or go.

And GM Steel Tubing by Rochester Products is the outstanding leader. Cadillac, Buick, Oldsmobile, Pontiac and Chevrolet—GMC and Chevrolet trucks—plus other fine cars and trucks . . . *they all choose and use steel tubing by Rochester!* But that isn't all! You'll find GM Steel Tubing in tanks and trains, refrigerators and freezers . . . in a wide, wide variety of products. If your design or production problem can be solved by tubing, see a Rochester Products engineer or write us for further information.

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FIGURES OF THE WEEK



Business Week Index (above)

\$ Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
*139.2	139.1	139.0	120.2	91.6

PRODUCTION

Steel ingot production (thousands of tons)	2,198	+2,218	2,095	1,652	1,281
Production of automobiles and trucks	193,495	+195,079	190,140	139,263	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$53,804	\$51,226	\$45,601	\$36,048	\$17,083
Electric power output (millions of kilowatt-hours)	9,727	9,725	10,047	8,586	4,238
Crude oil and condensate production (daily av., thousands of bbls.)	6,806	6,789	6,721	6,433	4,751
Bituminous coal production (daily average, thousands of tons)	1,460	+1,489	1,473	1,148	1,745
Paperboard production (tons)	266,804	259,007	259,402	223,579	167,269

TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	68	68	65	67	82
Carloadings: raw materials (daily av., thousands of cars)	42	41	42	36	53
Department store sales (change from same week of preceding year)	+2%	+5%	+2%	-3%	+30%
Business failures (Dun & Bradstreet, number)	222	178	264	223	22

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	392.7	399.3	413.7	426.9	311.9
Industrial raw materials, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100)	90.7	92.1	92.9	81.2	††73.2
Foodstuffs, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100)	86.5	88.1	90.5	99.5	††75.4
Print cloth (spot and nearby, yd.)	18.8¢	18.9¢	19.0¢	19.9¢	17.5¢
Finished steel, index (U. S. Dept. of Labor BLS, 1947-49 = 100)	144.7	144.7	144.7	140.9	††76.4
Scrap steel composite (Iron Age, ton)	\$37.58	\$37.00	\$35.83	\$23.50	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.)	33.000¢	33.000¢	33.000¢	29.985¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.41	\$2.43	\$2.46	\$2.43	\$1.97
Cotton, daily price (middling, ten designated markets, lb.)	33.60¢	†34.03¢	34.20¢	34.21¢	30.56¢
Wool tops (Boston, lb.)	\$2.05	\$2.05	\$2.10	\$2.12	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's)	293.7	292.1	291.5	210.4	135.7
Medium grade corporate bond yield (Baa issues, Moody's)	3.49%	3.48%	3.46%	3.55%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	1½-1¾%	1½-1¾%	1½-1¾%	2%	¾-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks	56,270	56,744	57,639	53,913	††45,820
Total loans and investments, reporting member banks	84,416	84,334	85,359	78,855	††71,916
Commercial and agricultural loans, reporting member banks	22,351	22,236	22,054	22,407	††9,299
U. S. gov't guaranteed obligations held, reporting member banks	34,599	34,750	35,799	32,292	††49,879
Total federal reserve credit outstanding	24,813	24,668	25,262	25,689	23,883

MONTHLY FIGURES OF THE WEEK

	February	January	January	January	January
	Latest Month	Preceding Month	Year Ago	1946 Average	
Average weekly earnings in manufacturing	\$74.93	\$73.97	\$71.28	\$43.82	
Employment (in millions)	59.9	60.2	60.1	55.2	
Unemployment (in millions)	3.4	3.3	3.7	2.3	
Personal income (seasonally adjusted, in billions)	\$290.7	\$291.4	\$284.9	\$178.0	
Farm income (seasonally adjusted, in billions)	\$15.2	\$14.9	\$17.0	\$16.9	
Consumer credit outstanding (in millions)	\$29,684	\$30,125	\$28,724	\$6,704	
Installment credit outstanding (in millions)	\$22,436	\$22,467	\$21,836	\$3,174	
Manufacturers' inventories (seasonally adjusted, in millions)	\$43,645	\$43,748	\$46,382	\$21,238	
Wholesalers' inventories (seasonally adjusted, in millions)	\$11,540	\$11,510	\$11,790	\$5,489	
Retail sales (seasonally adjusted, in millions)	\$14,871	\$15,123	\$13,622	\$8,541	

*Preliminary, week ended March 5, 1955.
†Revised.

†† Estimate.

‡ Date for "Latest Week" on each series on request.

in BUSINESS this WEEK . . .

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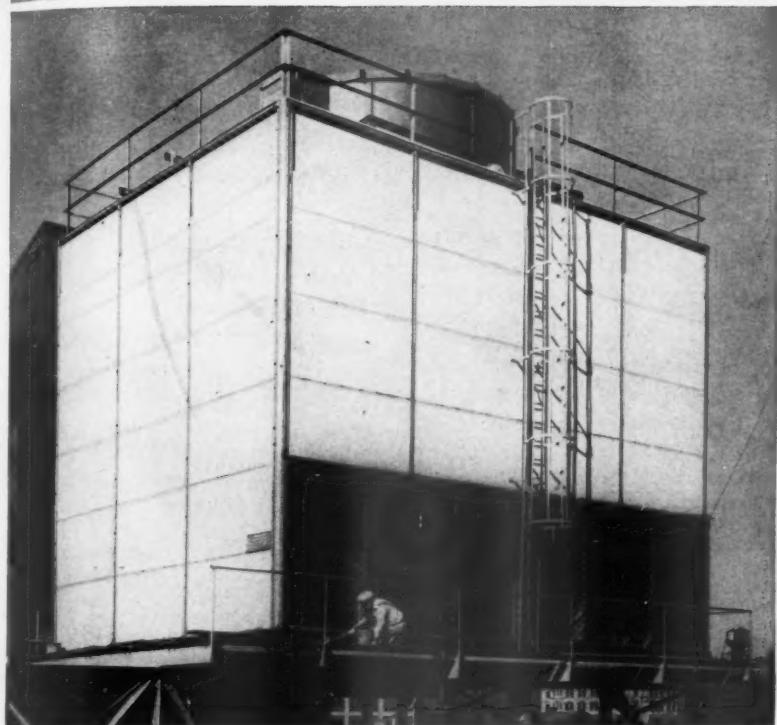
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SCIENTIFIC BEACHCOMBER PROSPECTS FOR OIL. Young researchers scour Gulf of Mexico shore p. 66

ZILCH, ZUMAS, AND GERF. New techniques in teaching math cut boredom p. 68

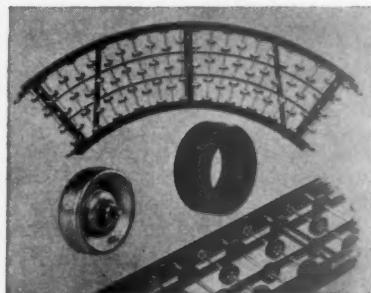
LOOK WHAT RUBBER PRODUCTS MADE WITH NEOPRENE ARE DOING



AIR-CONDITIONING COOLING TOWER has corrosion-resistant neoprene coatings on drip pans. Other types of coatings used previously cracked from temperature changes and soon exposed metal to corrosion. Flexible neoprene coatings have already given 2 years' perfect service—will probably give 4-6 years more. A striking example of how neoprene protects against corrosion . . . stays tough and flexible in service.



SEAWORTHY AFTER 20 YEARS, this hose line—used to transport molasses from shore to ship—includes some lengths made with some of the first neoprene ever produced. Neoprene's resistance to salt water, sunlight and aging makes this story possible.



IMPROVED CONVEYOR has ribbed tires of resilient neoprene to cover metal "skate wheels." Operation is quieter, fragile materials move more safely with no danger of scratching. Resistance to abrasion, oil and grease gives tires long mileage.

Neoprene coatings save \$9,000 in replacement costs for Philadelphia store

A corrosive combination of moisture and acid sludge proved too much for air conditioner drip pans in Lit Brothers department store in Philadelphia. Pin-holes developed, leaks were common. Of all protective coating materials tried, only flexible neoprene coatings stood up to acid attack and temperature changes. Saved: 18 large drip pans . . . \$9,000 in pan-replacement costs!

Economies like this are not uncommon with long-

lasting products of neoprene, Du Pont's chemical rubber. In your plant, you'll find neoprene conveyor belts, V-belts and hose can substantially cut replacement costs. And if you include a component part of neoprene in your product, you add selling points *no other resilient material can match*.

Send for our new illustrated booklet. It gives dollars-and-cents examples of how neoprene made the big difference in many industries.

MAIL THIS COUPON FOR FREE BOOKLET

E. I. du Pont de Nemours & Co. (Inc.)
Rubber Chemicals Division BW-3
Wilmington 98, Delaware



Please send me your free booklet—"A Report on Neoprene . . . for the Industrial Executive."

Name _____ Position _____

Firm _____

Address _____

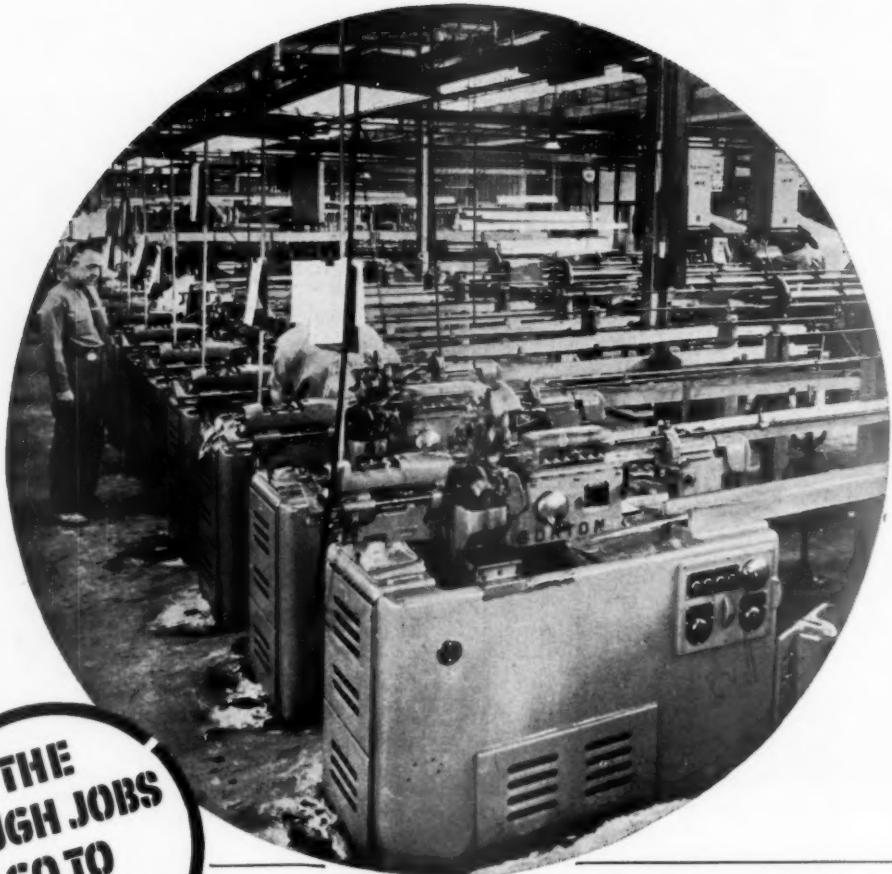
City _____ State _____

NEOPRENE

The rubber made by Du Pont since 1932



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY



THE
TOUGH JOBS
GO TO
TEXACO

BENDIX AVIATION CORP.

(SCINTILLA DIVISION), Sidney, New York, has been using Texaco Cleartex Oil for 5 years on the battery of automatic machines in the picture. Bendix has kept close track of the results. They found — a few short months after Texaco Cleartex Oil went into use — that they were doubling their drill life... eliminating copper staining... maintaining uniform hole size... and reducing their lubrication costs. Today — 5 years later — Bendix Supervisor Ray Beames reports: "These benefits are still continuing... In addition, there has been no maintenance necessary on the lubricating sides of the machines."

BENDIX is just one of the many famous corporations which have achieved top results with Texaco. There are three good reasons for this wide acceptance: *field-proven* Texaco Lubricants, developed with the aid of the finest research facilities available... *field-experienced* Texaco Lubrication Engineers to advise on their use... and *fast, efficient service* from over 2,000 Texaco

Distributing Plants in all 48 States. This combination can help bring production *up*... and costs *down*... in every major field of industry and transportation. One agreement of sale supplies all your plants wherever located. For details, call the Texaco Distributing Plant nearest you, or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.

TEXACO
INDUSTRIAL LUBRICANTS





DULLES AND CHURCHILL SET A NEW COURSE:

Coexistence—on Our Terms

Washington and London have decided to use the West's superiority in nuclear striking power to enforce peaceful coexistence—whether or not the Communists want to live by their own slogan.

That's the substance of the new, tough language used about Asia this week by Secy. of State John Foster Dulles and about the H-bomb last week by Prime Minister Sir Winston Churchill.

It's the West's answer to the new aggressiveness Russian policy has shown since Malenkov fell. The Communists have been openly using H-bomb blackmail to split the West on (1) German rearment and (2) the situation in Southeast Asia, particularly Formosa.

• **H-Bomb Answer**—The new U.S.-British policy is also based on the H-bomb. It offers no military threat to present Communist positions, but it insists it will use force against any Communist effort to make new gains. It is a policy of containment—but containment with teeth. In making it stick, the deterrent power of U.S. and British nuclear weapons will play an ever increasing role.

• **Risk**—Some risk of war is involved, of course, but, as Washington and London see it, this is the only way to deal with the Communist leaders who now rule in Moscow and Peking. Eisenhower and Churchill don't think Moscow will dare provoke a war as long as the U.S. keeps its big nuclear lead—a matter of another two to four years. And, meanwhile, there's a chance that the internal crisis in Russia will produce a regime that's willing to reach an honest disarmament agreement with the West.

Failing that, in the next few years Russia itself will gain the power of annihilation that we already possess. Even that would still leave a powerful deterrent to world war—the knowledge that war would result in the almost certain annihilation of both sides.

• **The Stage Setting**—To identify the basic elements of the new situation, you have to put the Dulles and Churchill speeches against the backdrop of recent Communist strategy.

Whatever the intentions of Malenkov's soft line may have been, by last summer Foreign Minister Molotov had obviously abandoned the soft line and

was operating Soviet foreign policy on the Stalin pattern. A victorious war in Indo-China was to be the wedge for Communist conquest of Southeast Asia and for splitting the West so deeply that it wouldn't be able to agree on German rearment.

In Indo-China the policy worked. But not in Europe. By fall, the West had recovered from defeat of the European Defense Community and seemed about to agree on Western European Union.

So the Communists worked out a new strategy: using Formosa to stir up a new crisis for the West. Last October, Marshal Bulganin, now Soviet premier, and Communist Party boss Khrushchev spelled it out in Peking.

The decision probably had something to do with Malenkov's fall. In any case, that was the time when Molotov started using H-bomb blackmail in a big way—no doubt to force on the West another settlement like the one in Indo-China.

But this time Washington and London are calling Molotov's bluff.

• **U.S. Position**—As Dulles has made clear, first at the Southeast Asia Treaty

Organization meeting in Bangkok and later in the radio address reporting on his trip, U.S. policy now boils down to this:

• The U.S. will give no more ground to Communism in Asia. It will meet force with force, in Southeast Asia as in Formosa.

• Our defenses in Asia are all of one piece. A Communist attack anywhere along the line will be met with a war on three fronts—from Korea, from Formosa, from the south.

• Defense rests on a mobile striking power substantially greater than we had in the Pacific at the height of the Japanese war.

• Japan will be built up economically and militarily as a decisive factor in the Far East.

Dulles told our SEATO allies that such a policy among non-Communist nations can block the expansion plans of Peking and Moscow. He said comfort can be taken from the way Russia is overextending its economy by trying to catch up with the U.S. in nuclear weapons, support Red China, and boost domestic consumption—all from a shaky agricultural base.

• **British Position**—Churchill presented the long-range side of the new policy. He announced Britain's decision to build the H-bomb and to base its whole military policy on "defense by deterrents." He told Moscow and the world:

• With the H-bomb, and its wide zone of radioactive contamination, the Russian land mass has become a target almost as vulnerable as the small, densely populated areas such as Britain and Western Europe. It was different with the A-bomb, when Russia could have expected to gain a quick advantage.

• It will be two to four years before the Russians can match the U.S. in power of annihilation; meanwhile the West will continue improving its nuclear weapons.

• Thus, the U.S. and Britain can enforce peaceful coexistence on the Communists until the Reds are prepared to negotiate a real peace or until the Soviet system collapses in chaos.

• **No Desperation**—Western strategy involves a gamble, but it's not a policy of desperation. Churchill and Dulles feel that strong elements in the U.S.S.R.—presumably in the Red Army and the top industrial bureaucracy—put national security and the welfare of the Russian people ahead of the ambitions of international Communism.

They regard the Kremlin shakeups as a sign of how serious Russia's internal crisis has become. So they are more determined than ever to keep a tight ring around the existing Communist empire, to stay as far ahead as possible in the nuclear race, and to sit things out.

The Ears on Your Of

"I never say anything on the phone that I wouldn't want to be confronted with later. I learned that when I worked in Washington." That is the comment of a New York business executive who isn't worrying about recent revelations of a police and telephone company raid on an elaborate midtown wiretapping center.

Others aren't resting so content. Details of the tappers' operations are scant, but one man close to the case figures as many as 60,000 phones in the area may have been accessible to the listening post. That would include the head offices of many of America's largest corporations.

So far, only two have been named as actually having been tapped—E. R. Squibb & Sons, now a division of Olin-Mathieson Chemical Corp., and St. Joseph Lead Co. Neither admits to any idea of who was tapping or why.

• **Private Ear**—One rumor indicates, however, that five of Squibb's lines were being monitored by a famous private detective for a rival pharmaceutical house. Only four of the Squibb taps were identified. They went to the four top men in the company. It has been suggested that business clients of this investigator—he handles only blue-ribbon stuff—financed much of the center's listening work.

This week, the New York State Legislature began a probe of wiretapping aimed at determining its extent and at possible tightening of laws against its use.

• **Old Profession**—Business espionage is doubtless as old as business. Cases that involve divulging of trade secrets go back more than 200 years in this country and in England. A whole body of law has developed relating to this sort of unfair competition.

In industries, such as chemicals, where filing a patent would tip your hand to the competition, spying has a long history. Before World War II, Lever Bros. Co. and Procter & Gamble Co. went to court over charges that P&G had bribed a Lever man to give them the process for making a new kind of floating soap.

The fashion field and the auto industry have been full of it, too. For years, some publications that issue auto production figures had to get Chrysler output by bribing people inside the company. And when the Pennsylvania Motor Truck Assn. sued the public relations firm of Carl Byoir & Associates and the Eastern Railway Presidents Conference (BW-Jul.25'53,p34), much of its material came from files it got from a former Byoir employee. Byoir and the railroads charged that she had

been paid by the truckers to abscond with the files.

• **Wagging Tongues**—Alcohol serves business espionage, too. An advertising executive observes, "There's hardly any secret a shrewd questioner can't get out of a Madison Avenue bar at 5 o'clock." An industrialist says, "There wouldn't be anywhere near so much point to picking up all those convention expense accounts if you didn't expect your people to bring home what the other guy got drunk enough to disclose."

Salesmen generally exchange brags that reveal what the other fellow is doing. Scientists and engineers are constantly swapping secrets, too. And in some cases the speed of business intelligence rivals that of sound itself. The aluminum industry has an especially fast "jungle telegraph." A West Coast official once mentioned to a friend that he couldn't make a meeting because of his wife's illness. In 20 minutes he had a call from a customer in New Orleans expressing sympathy.

I. Legitimate Tapping

Wiretapping is something else again. The first case dates back to 1895, less than 20 years after the phone was invented. Since then, state and federal laws and a string of court cases have served to confuse the issue completely.

The Federal Communications Act of 1934 provides that "no person not being authorized by the sender shall intercept any communication and divulge or publish it." Penalties range up to \$10,000 and two years. Only one man has ever been convicted under the law, and he wasn't charged with tapping.

• **Legal Evidence**—The principal barrier to federal action is that wire tapping is widely used by FBI and other government security agencies. And the Justice Dept. isn't likely to prosecute its people for doing their jobs.

Most states have some sort of law against phone tapping, mostly aimed at damage to lines and cables. Some forbid all tapping; others make an exception for government officials, and still admit illegal tapping data as evidence in court. So-called legal taps are those permitted in New York State and elsewhere on the basis of a court order and those that phone companies permit subscribers to install on their own phones.

• **Business Tool**—A subscriber, meaning for one thing a big company, can legally listen in on its own phones, meaning the lines of any and all employees' offices.

Companies constantly use phone taps to check leaks, thefts, manipulations,

Your Office Wall

and even employee morale. Of 500 licensed private investigators in New York State, at least 150 provide this sort of service. And just about every big city in the country has detective agencies that do tapping and investigation for business.

Louis Wolfson (page 30) this week remarked that, among other things, his rivals for control of Montgomery Ward & Co. were "sending detectives around the country to follow me."

II. Going Too Far

However, tapping the phones of competitors, suppliers, customers, and associates is generally illegal. It is practically impossible to determine its extent, but nobody doubts that it has increased considerably. Ex-GIs out of the Army Signal Corps and other military police and security outfits are believed to have turned to illegal tapping for a lucrative living.

• **Components**—Sales of listening and recording equipment offer no clues, because they are also used in offices, in broadcasting, and elsewhere. An ad in a New York paper this week offers the Mohawk Midgetape, a pocket-sized recording device, for \$229.50.

"Wonderful aid," the ad reads, "for executives, salesmen, reporters, radio and TV, lawyers, investigators, advertising, physicians, etc." But there's no way of knowing which purchasers are the executives, the investigators, or the et ceteras. Some of the tappers are adept at building their own from materials anyone can buy at a radio parts store.

• **No Southern Custom**—Your chances of being overheard seem to depend mostly on who and where you are and, of course, what business you are in.

In Memphis a businessman says, "They just don't do things like that in the South." In Houston, however, it is phrased somewhat differently: "You're in a frontier town here. Houstonians are not as subtle as those Easterners. If somebody wants to pull a fast one, all he's got to do is hang around one of the fancy clubs around here, buy his prospect a couple of drinks, and in no time at all he'll have him hooked."

The exception in Texas seems to be the oil industry. Even the location of dry holes is worth money, and there seem to be few limits to the espionage methods used to check on the operations of geologists and prospectors.

• **But Elsewhere**—Anyone is likely to assume wiretapping exists when information turns up in strange places—as when an important railroad man recently showed himself familiar with

conversations conducted a few minutes before by a minority stockholder who was suing. A shrewd financial operator paid only \$200 more than the next bidder to buy a company, but no one thinks he was shrewd enough to have guessed that close.

On the West Coast, a private eye was hired by a food packaging concern to find out what its major customer was planning. The investigator tapped phones and learned the customer was going to start packaging the product itself. But the news came too late for the supplier to start hunting up other buyers before it lost the big account.

In Los Angeles, where tapping is illegal and reportedly widespread, an investigator for a chemical company hit a temporary snag. A competitor, about to market a new product, feared his phone was tapped. So he and his advertising agency man held their big talks while walking on a crowded street. The private detective overcame the problem by wiring himself with a miniature recorder and walking alongside.

III. How Can You Tell?

The big question, of course, is: How can you tell if your phone is being tapped, or if you are wired some other way?

The phone company says there is no way of detecting a professional tap. Any noise you hear is probably due to moisture in the cable or dust in the handset; professional tappers know better than to make any noise.

If you are really worried, however, the phone company will check your telephone lines. The New York Telephone Co. says it ordinarily gets about six such requests a day. With the news of the wiretap raid, it claims its requests tripled; others say the company is swamped. Even with such an inspection, the tap may not be detected.

• **Costs Plenty**—On the other hand, professional wiretapping and eavesdropping service comes high. Equipment costs at least \$500, and chances of its being confiscated make rental charges high. Though some tappers use automatic monitoring devices, most still use manpower. That's another \$100 a week per shift.

Then there is the cost of renting a listening post. If the owner of the vacant space knows what it will be used for, he is sure to jack his rates up. Add costs of bribing a janitor or employee to make the tap and maybe a phone company worker to help locate the right pair of wires.

Total cost of a tapping setup may run from \$350 a week up. And if more than one line bears checking, the cost can exceed \$1,000 a week. A man's talk has to be worth an awful lot to war-

rant such outlays by an eavesdropping competitor or customer.

Still, if a merger or some other big deal is coming up, it may pay—for the short haul. There are obviously some cases where even \$1,000 a week could be economically justified on a long-term basis.

• **Control Laws**—The current New York legislative probe and new bills in Congress and other state bodies will probably lead to a tightening and a clearer defining of the legal limits of this kind of eavesdropping. But that will affect principally police uses.

As for illegal uses by business, that's anybody's guess. The average businessman, when asked about wiretapping, says, "I never thought of it before." But now he has thought of it, maybe too late.

Rx for Radio

NBC thinks it has the cure for advertising losses: weekend-long show with ads on "magazine concept" lines.

Everyone talks about the impact of television on radio, but so far no one has done anything about it. At least, that's how the top management at National Broadcasting Co. feels about the situation.

Now NBC-Radio thinks it has a prescription for the ills that have afflicted radio since big advertising money began switching to TV. It's this:

NBC is working out a completely new "package" programming schedule for its weekend radio broadcast time. It will be a weekend-long continuous show with music, news, educational programs, interviews, biographies, documentaries, drama, comedy, and sports.

Scheduled to go on the air some time this summer, the new NBC weekend program will feature the "magazine concept" of advertising sponsorship that NBC Pres. Sylvester (Pat) Weaver and Executive VP Robert Sarnoff have adopted for NBC's TV shows (BW-Aug. 21 '54, p49). This means that many advertisers will take spot sponsorship of the long package show.

NBC is still working out details of its new programming schedule. But the Weaver-Robert Sarnoff team is sold on the magazine concept for radio. In fact, NBC-Radio even had a management shakeup over the weekend program. Ted Cott, NRG-Radio president, and William H. Fineshriber, Jr., vice-president in charge of the NBC-Radio network, have been replaced because they didn't go along with the idea. Robert Sarnoff has temporarily taken charge of the radio network.

Auto Production:

Now →

The Past →

U.S. Passenger Car Production per Month

800,000 —

700,000 —

AVERAGE OF JAN.-FEB. 1955 PRODUCTION

600,000 —

500,000 —

400,000 —

300,000 —

200,000 —

100,000 —

0 —

1948

1949

1950

Data: Ward's Automotive Reports.

Detroit Is Beginning to Wonders

An Atlanta (Ga.) dealer for Chrysler Corp.'s Dodge and Plymouth last week summed up the auto business with an unexpected question: "My problem is how do you distribute a shortage."

Auto production is so high you wouldn't think there could be a shortage. But new cars, as the Atlanta dealer pointed out, are selling so well that even an average production higher than at most other times in the industry's history (chart above) is not pumping out cars as fast as many dealers can sell them.

Comeback for Chrysler—The remark of the man in Atlanta was being echoed across the land, almost without regard to make of car. To hear the dealers talk, Chrysler has come back—and the comeback is an important element in one of the sharpest sales spurts the industry has ever known.

In January and February auto sales usually are near the low point for the year. And the auto factories deliberately try to over-produce so dealers will have ample inventory for April, May, and June. In addition, this year the auto companies face labor negotiations with the possibility of strikes. So total January-February production of more than 1.3-million cars, while higher than natural for those months, could be rationalized as inventory-building for the days ahead.

No Fat Inventories—Yet, something has happened. Inventories can't seem to fatten off the growing production the way they should. Figures available in Detroit—where there is always a hardcore of optimism—showed that at the end of January dealers' stocks were 479,999 cars, up only 120,000 from Dec. 31. At the end of February, stocks were about 560,000. The figure is meaningful because it is 80,000 cars lower than this time last year, when no strikes were

probable and the industry knowingly was building for fewer sales than the year before.

One observer expects stocks to get up to 850,000 by the end of April. This total isn't frightening because the "something" that has happened, according to Detroit, is an unexpected high volume of sales: about 510,000 in January and 550,000 in February. Those would have been respectable totals for spring months. Manufacturers have come to believe they portend a permanent new plateau for auto sales, and have raised their sights sharply for this year.

Production Records—In recent weeks, factories of nearly all makes have been breaking production records, sometimes daily. Ward's Automotive Reports forecasts a first-quarter production of more than 2.1-million cars, another new record. Ford Motor Co. is predicting production for the whole industry this year of 6.5-million cars, sales of more than 6-million, with nearly 600,000 sales in each of the three months of April, May, and June. This would provide a normal carry-over of several hundred thousand cars into 1956.

Possibly more revealing of Detroit's state of mind is the change in General Motor Corp.'s outlook. In January Pres. Harlow H. Curtice predicted sales of cars and trucks would reach 6.8-million. Last week he revised the total: 7.5-million. He said car sales would be 20% higher than in 1954, which totaled 5.5-million. So Curtice is forecasting car sales of about 6.6-million.

All Chrysler divisions report a considerable backlog of orders, even though January deliveries were 70% higher than a year ago and the company's factories are straining to keep up. Plymouth, for instance, has passed Buick in production and is back in its No. 3 spot (al-

though not in sales), and still claims orders are running 35% ahead of production.

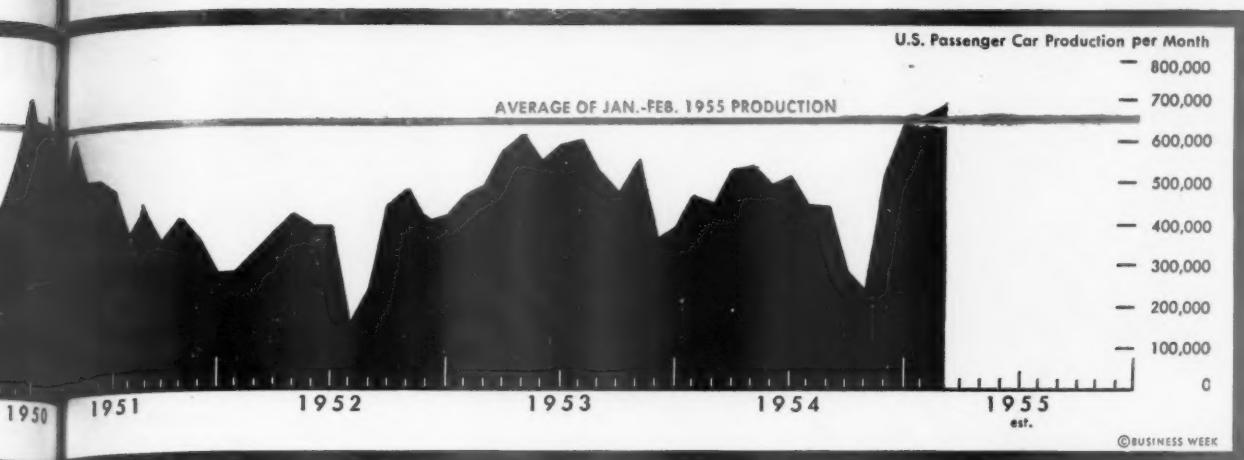
Is Detroit's optimism well-founded? To see what's happening at the point-of-sale, BUSINESS WEEK sent its reporters out to talk to auto dealers last week.

- Sales and Stocks**—Sales actually are good—generally from 25% to 300% (in the case of some Chrysler-line dealers) above a year ago. And dealers look for them to hold up. A Chevrolet dealer in Boston is maintaining a stock of 300 cars (his stock is an exception)—because he thinks they will move quickly come spring. Dealers don't think present sales are borrowed from the spring.

A large Chevrolet dealer in the Southeast says, "I've been astounded at sales and can't figure out why they've held up so well. I've got a 20-day supply of cars on hand. I'd like about 60 days as a hedge against a strike, but I can't get it."

It's the same story around the country: A Ford dealer in Pittsburgh reports sales up 25% over last year; he'd like about 30 cars in stock and has eight. A Buick dealer in Tulsa sold 110 cars in January, 125 in February and is complaining he couldn't get enough. A Detroit dealer likes to carry several hundred cars and he has less than 100.

- Some Clinkers**—Reporters heard an occasional clinker in the chorus. A Houston dealer says people are mistaken to believe sales are keeping up with production. His own aren't. And in Portland, Ore., a dealer agrees that inventories are low, but adds, "This car shortage could turn right around in just a few weeks at the rate they're being produced. For some makes the dealers are faking their inventory figures—I think they're really higher. We may be riding for another fall, like in August, 1953. I'm worried."



Is the Future Here?

• **Chrysler's Surge**—You'll find no such pessimism among Chrysler dealers. Their sales are good and getting better. And many a dealer, as well as Detroit people, say Chrysler's surge—backed by a tremendous advertising campaign to make drivers dissatisfied with their present cars—has helped sales of all makes.

The dealers believe Chrysler's advertising is shooing people into the showrooms. After that, to believe the dealers, a sale is easy.

Most dealers seem to think the up-swing in Chrysler-line sales comes principally from owners of Chrysler-made cars. But there are some Chrysler-line dealers, who mention "conquest" business, and here and there some gloating over taking Cadillacs in on trade for Chryslers.

Possibly because they learned to tighten their belts last year, possibly because of the novelty-appeal of their cars, Chrysler dealers generally are making good profits and do not have to shave their prices substantially. That's not universal.

• **Profits and Credit**—“This is a profitless prosperity,” the average dealer was saying last week. “Profits are up over last year on volume. If it drops, look out.”

A Birmingham dealer probably speaks for most of the fraternity: “This selling war could be ruinous. It's getting almost to the point that a buyer comes in and tells you what he will pay for a car and how much he will take for his own. If you don't agree on somewhere near his terms, he'll go somewhere else and get them.”

The dealers are even using volume as a leverage of credit because commissions on financing and insurance add to the total profit. Although in some sections of the country credit is normal

or a little tight, buyers are getting 36 months to pay in most places. A Southern dealer handling his own paper goes up to 48 months.

“They're buying terms, not cars,” says a dealer in Worcester, Mass. “There are a lot of people buying cars who shouldn't,” says another in Atlanta, “but that's not my business.” And in Salt Lake City a dealer says credit is the “real competitive end of the sell.”

Federal Reserve Board figures, showing all instalment loans up \$600-million over a year ago, support the dealers' feeling that credit sales are rising. This doesn't always show up in an auto sale.

More than 50% of all new car sales are for “cash.” This means most of the time that the buyer negotiates his own financing. Dealers want the business. So the easier they can make credit, the more financing commissions they get. And the easier the credit, the higher the sales; the higher the sales, the higher the profit.

• **Behind the Sales**—Perhaps surprisingly, the dealers and economists in Detroit agree on the main reasons for the high rate of sales: public confidence in business conditions and a feeling of job security; the great number and variety of all-new models this year; and aggressive selling tactics.

There is mention of two subsidiary reasons: fear of a strike in auto plants; and the continuing Ford-Chevrolet battle, which makes all dealers get out and sell in self-defense.

The major difference between the dealers and Detroit is that the dealers speculate on how long the boom will last. Your usual Detroit economist will say it is no boom. It is “normal growth”—and he will trot out some persuasive arguments.

The industry economists start with the well-known facts: disposable income

is the highest it has ever been; savings are high; since 1940 the birth rate has been high.

• **Future Is Here**—These are, roughly, the same points industry officials have been hammering on in the past to argue that the long-term future of the automobile business is sound. The intriguing element is that now the same statistics are being used to explain the present sales level. It could indicate an economic fact so stark that it is not fully realized even in Detroit: The auto industry's future is here.

Some economists in Detroit accept that view for two reasons:

• The shape of today's economy was cast in the Thirties with establishment of unemployment compensation, social security, fiscal management, and other government measures. These things have been firmly locked into the economy—but because of wars and their aftermath never have been fully influential until now.

• The high birth rate. The post-war birth rate, say the chart-watchers in Detroit, has forced the move to the suburbs where in most cases a car is an absolute necessity. Even in the cities, a baby generally means a car sale—as any parent who has lugged a baby and accoutrements on a bus will testify.

Auto industry forecasters come up with the belief that they are in a period when the moving average of annual car sales is about 5.5-million. By 1960 it should be about 6-million. (It's important to note they are talking about a “moving average”; sales this year will be more than 6-million, but might well drop to 5.8-million in 1956.) The moving average should hit 8 million by 1970 when the post-war crop of babies will begin their own “family formation.”

The dealers leave such high-level economic thinking to Detroit. One in Pittsburgh has his own, pithy reason for the rush of customers: “It's about time they started buying. They've been stalling long enough.”



LOUIS E. WOLFSON arrives in Los Angeles to "alert" Montgomery Ward stockholders to dangers of Sewell Avery's management.



THE PRESS was impressed by his direct talk.



STOCKHOLDERS heard his view on dividends.

Wolfson Takes His Proxy Fight to



EDMUND A. KRIDER, Montgomery Ward president (facing camera), told reporters, "This vicious attack won't go unchallenged." Ward has organized a door-to-door campaign to counteract Wolfson's activities.

Louis E. Wolfson may not succeed in dethroning Sewell Avery as head of Montgomery Ward, but his swing around the country to win over stockholders is a triumph in the use of public relations in a proxy fight for control of a corporation.

From the minute he stepped off the Sunset Limited in Los Angeles last week until he boarded the Lark for San Francisco two days later, Wolfson showed himself as a polished performer. Presenting himself as the earnest young crusader who will not rest until he takes over the "poorly managed" Montgomery Ward and "returns it to the stockholders," Wolfson played to packed houses. His direct delivery held his audiences rapt.

Wolfson's three-day stand in Los Angeles was the second of a series of personal appearances that includes San



SECURITY ANALYSTS asked for more about his plan for top management.



TOWN HALL meeting drew an overflow crowd of 600 to hear of Ward's West Coast decline.

Right to the Stockholders

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2, 1955

Francisco, Chicago, Detroit, and New York.

Confident—During the three days, Wolfson directed a steady stream of charm at the stockholders. When he wasn't appearing before large groups, he was entertaining a parade of well-heeled investors, securities men, and local businessmen in his various hotel suites.

By the time he played before 785 stockholders—who claim to represent 81,746 shares—Wolfson's confidence was running high. He spoke of "our company," "when I'm director," and "when our organization takes over." Through all his talks, he stressed his own background in finance and management.

At his first press conference, Wolfson localized the argument. He explained that in the greatest population boom

the Pacific Coast has ever seen, Ward closed five stores, while Sears, Roebuck opened 17. He also told a Town Hall meeting that "Twelve years ago, Ward's had 18% of the business done by the top 10 companies. Now its share is 11%."

To the security analysts—Wolfson's best crowd—he explained his offer of compensation to get top management to come to Ward's. He would have the president buy 10,000 shares and each of the five executive vice-presidents 5,000 shares—all at the going market price. They would pay 10% down and the balance out of dividends. He also said that there should be no employee profit-sharing plans until the stockholders had received a 6% return.

At the Coffee Cup Conference for stockholders, Wolfson denied that he would engage in "melon splitting," or



HANDSHAKING and well-wishing showed the impact of Wolfson's personal approach.

that he was in the Ward fight just as a "flier." When somebody asked him why he got into the proxy fight, he replied that his wife and four children were asking the same thing, but that now he was in, he considered it the greatest challenge a young man could have. At the same gathering, he made much of what he considers his personal crusade—to bring back corporate democracy; and by increasing confidence in the management of public-owned corporations, to bring out of hiding "billions" in dormant funds and at the same time create millions of new stockholders.

• **Team Work**—At the same time, stockholders got tangible proof that Wolfson is already building a team. E. W. Endter, a member of Wolfson's slate of proposed directors for Ward, resigned this week as president of California Oil Co., a subsidiary of Standard of California. According to Endter, the oil company gave him the choice of retiring from the company or from Wolfson's slate.

Endter says he is convinced that both Sears and Ward's pressured Standard into this move. He asked R. G. Follis, chairman of Standard of California, he says, if either company had put any pressure on him. Follis answered, "I've had numerous communications." But a Sears spokesman told BUSINESS WEEK, "We wouldn't possibly

get involved in something like this."

Wolfson offered to release Endter, but Endter decided to throw in his lot with Wolfson.

• **Defender**—While Wolfson was selling himself to the stockholders, Montgomery Ward's president, Edmund A. Krider, was putting on a rival show in Los Angeles. Krider's production, however, had none of the razzle-dazzle that characterized Wolfson's.

Krider held one press conference. Asked about the closing of the five Pacific Coast stores, he replied, "Wolfson is not informed. We don't expect the West Coast growth has ended. Montgomery Ward is not Sears' main competition." He did reveal that Ward sales would be down 11% and that earnings would fall from \$6.12 in 1953 to about \$5.25 for 1954.

Krider told reporters that he would meet privately with bankers and financial people, but wouldn't hold regional stockholders' meetings. The day after the press conference, however, he called a meeting of managers and other Ward employees and mapped out a door-to-door campaign (by Ward employees) to acquaint stockholders with Wolfson's activities.

Krider indicated just how bitter the fight would be when he called Wolfson an "irresponsible raider," and described Wolfson's management as "the outrageous milking job of the ages."

Renegotiation . . .

... wins in White House.

President asks two-year extension of law; Congress seems sure to agree.

Pres. Eisenhower, after some vigorous pulling and hauling within the Administration, asked Congress last week to extend the Renegotiation Act for two years. The law, first passed in 1951 and extended in 1954 for one year, expired on Dec. 31.

The tussle between Secy. of Commerce Sinclair Weeks and the military services over renewal of the act had cast some doubt on what the President would do. The law provides for special government review of earnings from defense contracts or subcontracts of companies whose aggregate defense sales exceed \$500,000 in one year. The purpose is to retrieve what the five-man Renegotiation Board decides is "excessive profits."

• **Pro and Con**—Secy. Weeks voiced the views of most defense contractors in opposing extension of the act on the ground that renegotiation is no longer needed. The military services lined up against him.

They conceded that improved contracting techniques, such as price redetermination clauses, are helping procurement officers to price closely enough on many military items. But price redetermination, which requires contractors to sit down with procurement people to readjust prices during production, doesn't touch subcontracts. And even with such clauses, the services argued, really close pricing is still a tough proposition on such goods as supersonic planes and guided missiles.

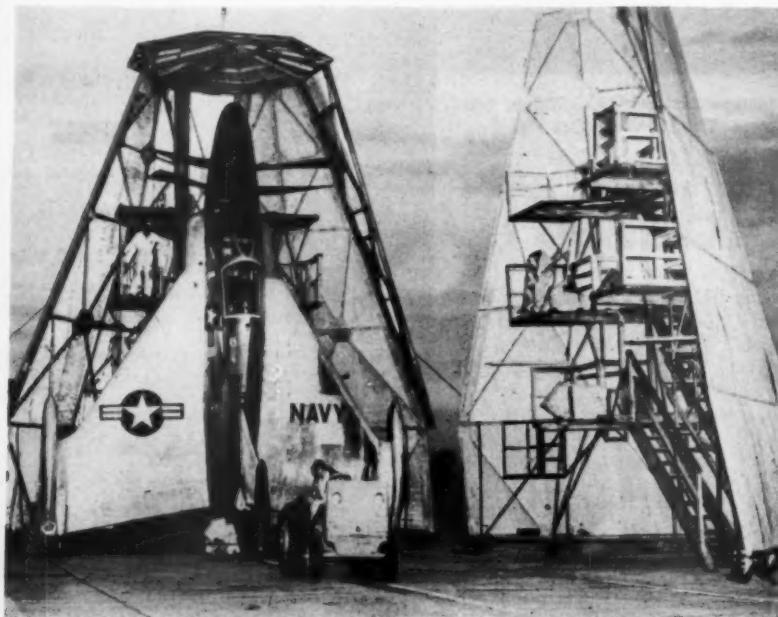
• **Outlook**—The services won their point with the President. And Congressional approval looks like a sure thing.

If it's renewed, the act will be made retroactive to cover contracts awarded since Jan. 1. It will probably be extended in its present form.

• **Board**—The point doesn't concern renewal, but Congress will be impressed with the fact that in the past seven months the Renegotiation Board has recovered over \$210-million from defense contractors. That's about half the total returned to the Treasury since 1954.

Actually, the board plays down figures on recoveries and emphasizes the "wholesome restraint" it says renegotiation has on price setting.

The board has handled some 16,000 cases, completed just under 12,000. Roughly 40% of those completed required renegotiation. In only one-fourth of these were refunds ordered.



Tepees Make Hangars for Pogo Planes

Convair has come up with something new in the way of airplane hangars to house its revolutionary XFY-1 "Pogo" plane—a folding portable "tepee." The

hangar on wheels encloses the plane like the halves of a clamshell. Built into the tepee is a triple-deck work platform.



How to wear four hats without going bats!

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For the **small businessman** who has many hats to wear and not enough time to wear all of them, Mr. Friendly now has a practical accident-prevention plan that pays off right on the barrelhead. It's the first complete safety program ever worked out for small firms (under 100 employees) and shows how productivity can be increased while stopping accidents. Here is a sure-fire cost reduction

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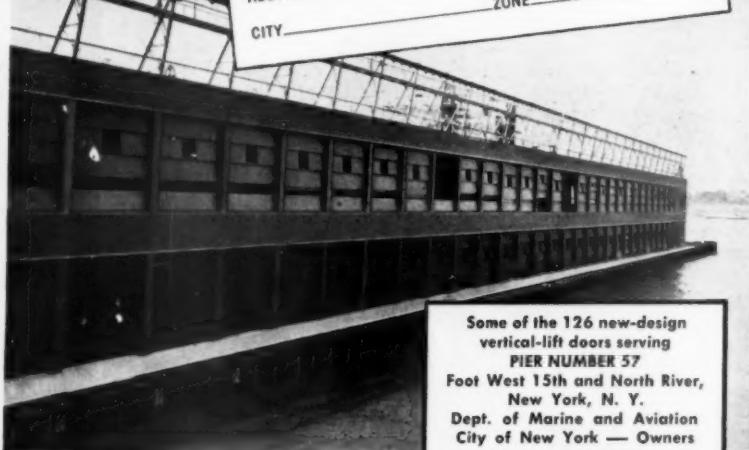
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Close-up of International-built doors at Pier No. 57. Note "nesting" of leaves when doors are open—also the protective barrier formed by a 4-ft. section of the lowermost leaves of upper-deck doors.

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IN SWEET'S
ARCHITECTURAL FILE

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INTERNATIONAL STEEL COMPANY

BUSINESS BRIEFS

Ford and GM will meet next week with the United Auto Workers to lay the groundwork for contract negotiations next month—GM's begin the week of Apr. 4; Ford on Apr. 11. Companies' attitude on discussing the controversial issue of guaranteed annual wages will be a key to what happens in formal negotiations.

U.S. Gypsum Co. announces it will spend \$30-million on expansion and improvement this year. In 1954, the figure was around \$9.5-million. Montgomery Ward's Sewell Avery (page 30), a notable non-expander, is a former president and board chairman of the expanding company, and is still a director.

New bosses at Koppers: Fred C. Foy now becomes president of Koppers Co., Inc. with the duties of chief executive officer and W.F. Munikhuyzen has moved up to board chairman after five years as executive vice-president.

Wholesalers' business in January was worth more than \$8.7-billion, says the Commerce Dept. The figure is about \$700-million higher than a year ago.

Growing Chrysler: The auto maker announces a "multimillion" expansion of engineering facilities, which will boost working space at engineering headquarters in Highland Park, Mich., by a third. It's the latest step on the Chrysler overhauling program (BW-Jan. 8 '55, p33).

Auto dealer franchises must have their day in court. Federal Judge J. Joseph Smith in Hartford has ruled that General Motors, Ford, and Chrysler must defend the \$1.2-million-plus suit brought against them by two former non-franchised dealers who had engaged in what the manufacturers call "bootleg" sales of new cars. The dealers claim they were forced out of business.

Atom-wise executives: That's the goal of the five-day course in nuclear doings being offered to businessmen by the National Industrial Conference Board. Tuition for the course is \$465; the campus is at New York's Westchester Country Club.

The need for zero temperature in refrigerator cars increases as housewives step up their demand for frozen foods (3.5-billion lb. last year). That's why the Santa Fe Ry. has ordered mechanical refrigeration units for 140 new cars from the Trane Co., La Crosse, Wis.



Keepin gchemical cars from cooling

Here's a job that's really man-sized! The worker above is insulating a whole chemical tank car with fibrous glass. His job of attaching this heavy-duty material to the metal surface of the car is a lot easier now than ever before—thanks to a 3M adhesive. It used to take a lot of time and patience to attach the insulation using straps and clamps. Now one man can do the entire job in short order with a minimum of effort. The adhesive is brushed on to the tank car, the insulation is pressed into contact and cut to size. That's all there is to it!

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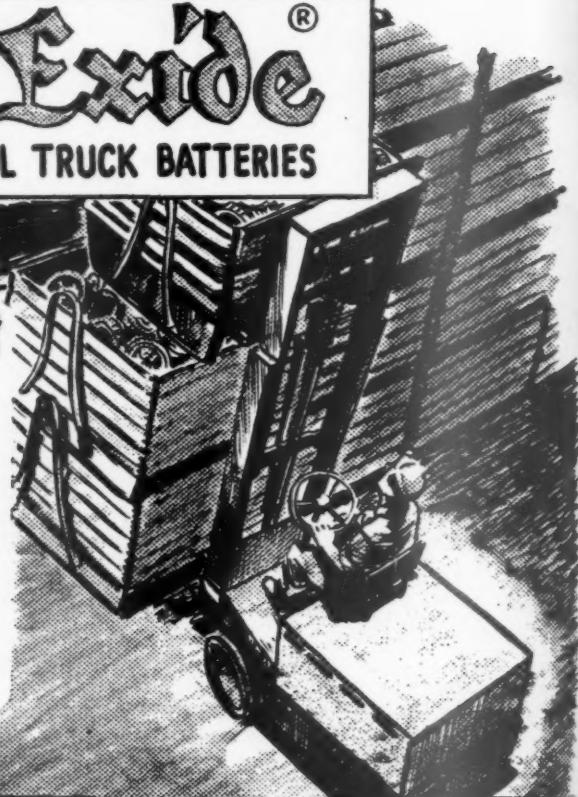
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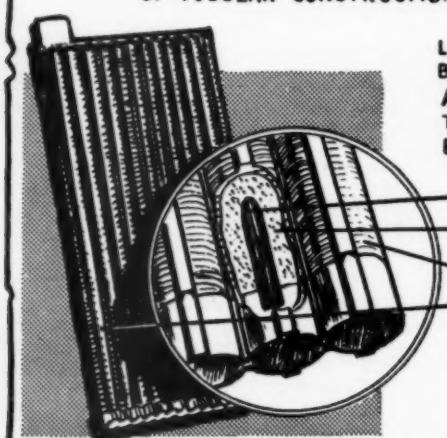


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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
MAR. 12, 1955

Business heckling by the Democrats is on the rise. The stock market inquiry, which started as "friendly," is becoming increasingly critical. And the Democrats in Congress are getting set for investigations that will show a hostile attitude right from the start.

A BUSINESS WEEK
SERVICE

The plan is to show "big business favoritism" by the GOP, at the expense of small business, consumers, and farmers.

Watch for House hearings by Texas Democrat Wright Patman. He will hammer the idea that small business hasn't had its share of consideration under the Eisenhower Administration—has lost ground, relative to big business.

The Senate will be busy, too, on antitrust. New Dealer Harley Kilgore of the Judiciary Committee has \$250,000 to take an over-all look at how the Administration has enforced the antitrust laws. The Sparkman Small Business Committee will take a detailed look at mergers, with the emphasis on how they change competitive conditions in an industry.

The New Jersey gasoline price war probe is broader than it appears on the surface. Investigators will get into charges of price discrimination, and the marketing of auto parts, as well as the selling of gasoline. Both House and Senate Small Business Committees are in on it.

There are more than a dozen inquiries in the works. None has the weight to change major Administration policies. But investigations are handy tools, well tested politically, and Democrats are using them to try to win back the White House and keep control of Congress next year. They all are unsettling to the business climate.

The maneuvering will be harder to follow than in the old New Deal days. Democrats feel they have neither the inclination nor the facts to repeat the attacks on "economic royalists" and "Wall Street barons." They are trying to make some political gains, nonetheless.

Democrats are holding back their fire in the stock market study. They don't want to be accused of causing a market downturn with sensational headline making. But they are also trying to phrase their inquiry to avoid giving the market a whitewash. They're suggesting this kind of caution: Today's market has a lot of the characteristics of the 1927-28 buildup that preceded the 1929 crash—and government should be thinking of restraints. Some say margin requirements should go up from the present 60% to 100%.

Administration tax policies are still under fire. Democrats this week backed down on their plan for a \$20 cut for each taxpayer and each dependent. Instead they are trying to lure votes in the Senate with a plan for smaller cuts to individuals, to be offset by extension of corporate and excise rates beyond the one year that Eisenhower seeks. But this is still unacceptable to the President; and he probably will win.

A review of the 1954 business tax revision law is under way. Democrats are attacking provisions that they say give "windfalls" to corporations

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
MAR. 12, 1955

on the handling of reserves for estimated business expenses. Democrats charge the windfalls could total more than \$1-billion, and Treasury Secy. George Humphrey now says some loopholes should be closed.

The Administration sees all this as politics, of course. The President and the Administration are counting on good times, no war, and the Eisenhower popularity to offset the Democratic tactics. Political experts will still bet on Eisenhower, unless a new issue develops. But that doesn't lessen the acute effects of the Democratic-inspired climate.

High-tariff forces are stronger than expected in the Senate. There is real trouble ahead on Eisenhower's reciprocal trade program, which cleared the House by the narrowest of margins. Traditional free traders from the South are now demanding protection for their new textile industry. They have Finance Chmn. Harry Byrd on their side. With him are Sen. Walter George and Sen. Robert Kerr, who is worried about oil imports.

Some restraints on tariff cutting may be voted by the Senate. And it will be nip and tuck whether the final legislation will give the President the added 15% rate-cutting authority he wants, without strings.

Eisenhower personally chose his new staffer on national security. He is a Texan, Dillon Anderson, who served with his predecessor Robert Cutler in the war, as well as with Gen. Lucius Clay, an Eisenhower confidant. Anderson is highly regarded, could make the job as big as Cutler's was—keeping tab on the National Security Council, on the Joint Chiefs, and on civil defense.

New antisubversion laws are being tested on several fronts, but it will be years before all guideposts have been driven into place.

Immunity for witnesses, voted by Congress last year, was challenged in New York this week. A grand jury witness was held in contempt when he refused to answer after being granted immunity from self-incrimination.

Red influence in some labor unions is being investigated by the Justice Dept. under the Communist Control Act of 1954. Where domination or control is charged, Justice can take the case to the Subversive Activities Control Board. A finding against a union would deprive it of Taft-Hartley Law benefits. But broad rulings can be appealed, so any final showdowns are still pretty far in the future.

A-bombs could be smuggled into the U.S. and planted strategically. It's a rather shocking fact, long known but one that officials like to duck. Now they are about to bring it out into the open.

That explains Sen. Bourke Hickenlooper's reward bill, which would make payments up to \$500,000 for information leading to the finding of atomic weapons "introduced" into or illegally "manufactured" in the U.S. This bill has Administration backing and is now before the Joint Committee on Atomic Energy. It was an Air Force reward of \$100,000 that persuaded a Red pilot in Korea to desert and fly his MIG to the U.S. side. Theory is that \$500,000 of cold cash might persuade a plotting Red to give a tip on bombs, if and when they are smuggled into the U.S. for war.



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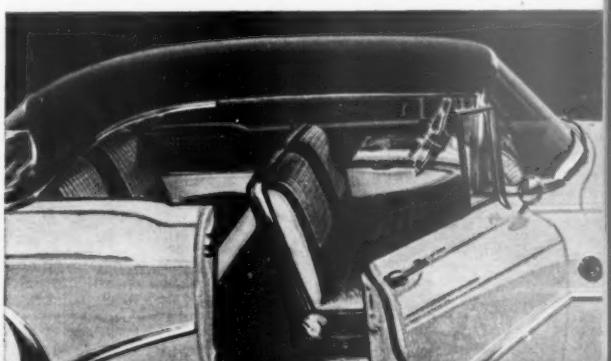
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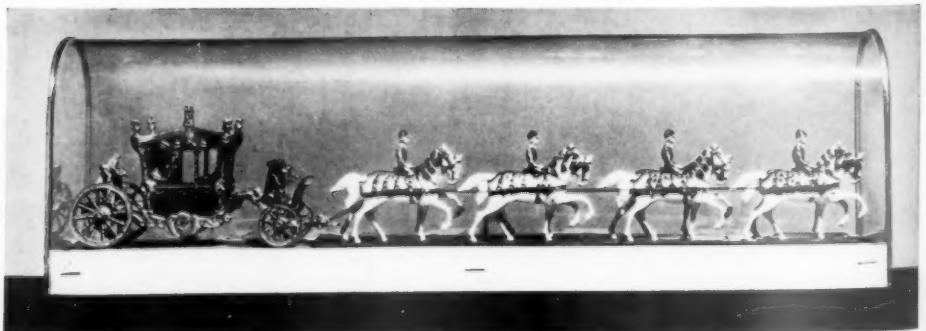
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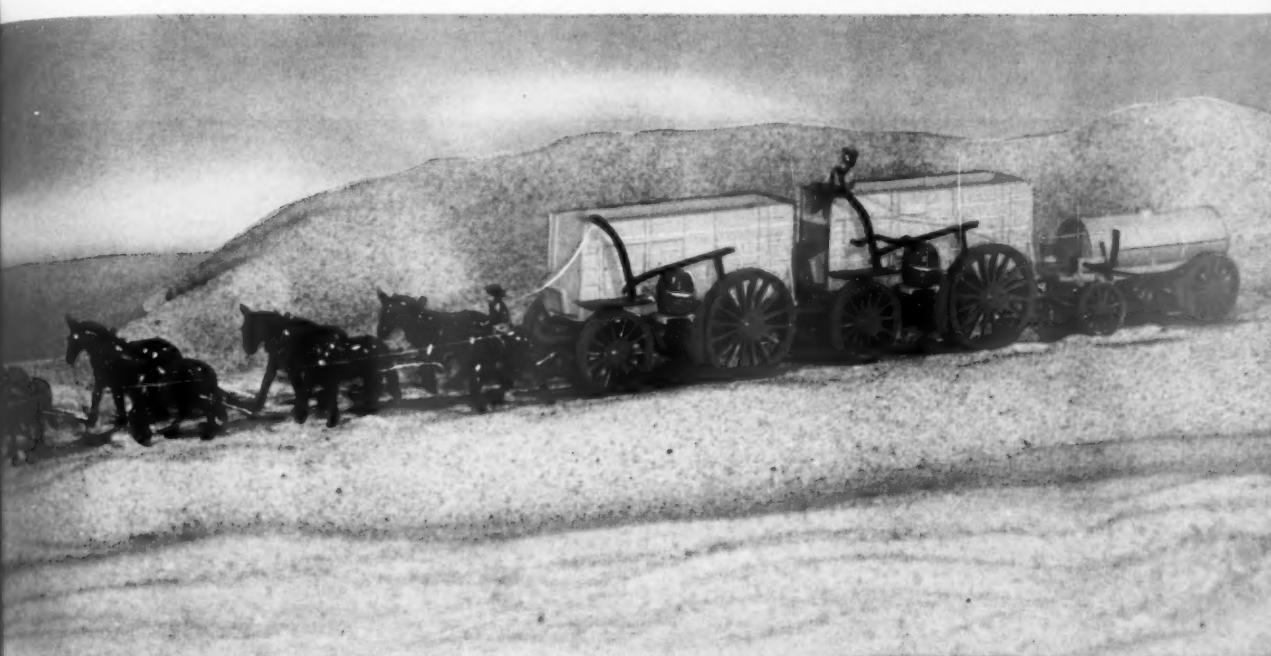
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PRODUCTION

Problem

HEINZ'S

H. J. Heinz Co., Pittsburgh, has six ketchup-making plants, and distributes its product from 70 warehouses. The plants and warehouses are all located in different parts of the U.S. So far, demand has equaled supply. And shipments to warehouses have exactly equaled the total capacity of the plants.

Of course, Heinz wanted to plan its distribution from plants to warehouses so that freight costs were cheapest.

But there was one kicker. Capacity in the West exceeded market demands. In the East, there was a high demand, and a shortage of product output. Considerable tonnages were shipped across the U.S. from Western plants to Eastern warehouses. So Heinz couldn't get cheapest distribution costs simply by shipping a plant's ketchup to the nearest warehouses.

Problem

THE NAVY'S

The Navy Dept. — like the Air Force, and the Army — contracts for purchases of material by asking manufacturers to submit bids, their lowest prices for so big an amount. The law says that a contract award must be made on an exact basis, and go to the very lowest bidder. But in a purchase of clothing, there might be nine different bidders who will ship their wares to seven scattered supply depots. A bidding manufacturer can quote several prices for different size lots of clothing. And it can also bid for a maximum or minimum order whatever its production capacity. Too, there are varying freight rates from its plant to the depots. The Navy's supply specialists must calculate the lowest bid, figuring in all of the variables that alter the bid.

Problem

THE MISSOURI VALLEY AUTHORITY'S

The Missouri River is about 2,500 miles long, and drains water from around one-sixth of the total land area of the U.S. Its waters for years have caused costly floods, mostly in the lower 1,000 miles. But the water is also a potential source of hydroelectric power, and useful for sanitation and irrigation. To use it, the Army Corps of Engineers is planning a series of dams in the Missouri Valley to be finished by 1960.

On the one hand, the Missouri is a product of nature. So its flow is subject to numerous variations: the seasonal rainfalls at its headwaters and downstream, the different kinds of topography that it drains, the widths of the channels along its 2,500-mile-long course. On the other hand, the builders must pick the locations for the dams that will best harness the Missouri's waters, allowing for the conditions of nature. They must also work out a scheme of management for most efficient power production, irrigation, and flood control.

©BUSINESS WEEK

Data: Harvard Business Review.

The Answer: Linear Programming

To solve problems such as those outlined above, industry and government are beginning to adopt a kind of mathematics called linear programming.

This process, sometimes called mathematical programming, is an orderly procedure for finding and proving the best answer to a problem that has a lot of variables working on each other. It was born during World War II to solve logistics problems in sea transportation. Mathematicians generally credit G. B. Dantzig of Rand Corp. with being the father of the method. As a management tool, it is still new.

Like operations research or statistical quality control, linear programming can help management find the precise answers to business problems that were formerly met only by judgment or intuition. More and more, its value is coming to be recognized outside the research room.

• Practical Uses—Programming can often save a company's money by pointing to the lowest production or freight costs, or by providing the formula for the mix of products that yields the greatest net profit. Even when it doesn't directly save money in these ways, the system cuts the number of man-hours needed for solving a tough everyday problem, and it gives the company brass the satisfaction of knowing that they have found the best answer.

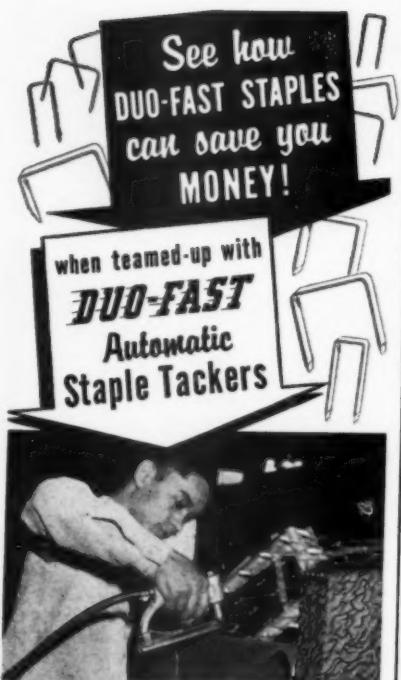
Some linear programming problems can be solved with paper and pencil; others are so big and complex that electronic computers are needed for the series of calculations. Either way, the procedure follows techniques worked out by men like Dantzig and by math groups at Princeton University, Carnegie Institute of Technology, the National Bureau of Standards, and the Office of Naval Research.

To get practical help today, a businessman can call in one of several consultants, such as Methods Engineering Council of Pittsburgh or Executive Services of Cleveland.

• How It's Done—Solving a linear programming problem is often a one-shot operation whose solution can then be applied repeatedly to a distribution plan or production schedule. After the basic problem has been worked, the solutions can even be followed through by semi-skilled clerks in many cases, or by digital computer operators in others.

By definition, linear programming is a mathematical method that juggles a number of alternative factors—all related and dependent on each other—to find the best combination.

The theory of this kind of math fits many business problems. Take a distribution problem like that of H. J. Heinz Co. (table, above). The ob-



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"... cost cutting is an attractive feature of linear programming . . ."

PROGRAMMING starts on p. 43

jective is to find the volume and routing of products from plants to warehouses that can be achieved at the lowest possible freight cost. The manufacturer provides the programming expert with the essential figures: the capacity of each plant and warehouse, the demands of each warehouse, the cost of shipping among all the plants and all the warehouses.

To start with, the operator of the problem works out a grid—some tentative shipping program that matches up the total plant output to the total demand from warehouses. This first program doesn't have to be the best—it's a starting point—but it does have to match total capacity with total demand.

From there, the operator revises his plant-to-warehouse grid according to a definite, prescribed series of steps, getting a progressively better distribution of individual shipments to take advantage of cheapest freight costs. The number of steps will vary with each problem but will generally be about equal to the number of plants and the number of warehouses.

The system provides a definite signal—a numerical rightness—when the best program has been reached.

• **Figuring Bids—Cost-cutting** is a feature of linear programming that's attractive to company executives—Heinz, for example, worked out a saving of several thousands of dollars in freight charges over the old by-guess-and-by-gosh system of planning. But savings aren't the only valid objective for linear programming.

For example, the armed forces have a problem in carrying out the letter of the law in awarding contracts: Contract awards must be made on a mathematically exact basis, to the lowest bidder. But the bids for a contract may come from manufacturers in many different localities, for various lot sizes, and the items may be finally delivered to several scattered depots.

The Dept. of the Navy finds that ordinary scratch-pad calculations take hundreds of hours to work out which is the legally correct low bid, but linear programming, with the help of a digital computer, can cut the time to a few hours. Mathematicians at the National Bureau of Standards are now doing the job on their computer—and producing not only the answers to who's low bidder but also a shipping schedule for each manufacturer.

• **Calculating Operations—**Similar complexity has cropped up in government

planning for operation of the dams in the vast Missouri Valley project (BW-Mar. 20 '54, p120). Here are two groups of interdependent factors: (1) the ever-changing, sometimes freakish, conditions of the river and its water shed, and (2) the man-made conditions that result from operation of the chain of dams. The objective: to control the dam spillways and gates to get the greatest benefit in power, irrigation, and flood protection—three interests that often compete with each other.

The government put mathematicians to work at Raytheon Mfg. Co. in Waltham, Mass., to use programming, calculus, and an electronic computer in studying operation of the river and its dams. This can be important in more ways than one. For example, if dams and water level can be controlled even 1% more efficiently, the whole project can gain \$500,000 more in salable electric power.

• **Limitations—**Programming isn't always a cheap and easy cure-all for a company's management problems, of course. Before giving the method a whirl, a businessman must be willing to settle for some limitations.

To start with, the factors he will use in a program must be accurate. If a manager wants, for instance, to increase profits by improving the distribution of materials among the plant's machines, he must have the production costs of his machines down pat. If he feeds in cost figures that are based on a shaky accounting system, the programming won't be reliable either. The point is that you must make your figures "stand still" in order to program them.

Another limitation is the sheer size of a linear programming problem. In a plant-to-warehouse relationship, a manufacturer is tempted to throw in a few more variables in trying to compute his end profit. He may specify that freight costs of varying amounts can be absorbed when shipping certain products from a central plant to scattered purchasers. Or to get more profit, he may sell his products at varying prices in different cities.

The adding of variables like these expands the size of the problem. It can get so big that it would need millions of programs—millions of trials—to arrive at the best answer. Then neither pencil-and-paper methods nor electronic computers will suffice; there simply wouldn't be enough calculating capacity.

Mathematicians are still trying to improve the technique so that it is adaptable to more applications. Most of the research is aimed at working out methods and programs for problems that can't be solved now, and to make the technique fit in more widely with computer operations.

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CREATORS OF AN INDUSTRY

Anti-Smog

Experts of seven nations swap air pollution data and come up with some notions about sulfur.

Though the word "smog" may be of U.S. coinage, the combination of smoke and fog that it describes isn't limited by international boundaries—the problem of what to do about it concerns many nations. Last week in New York, engineers and scientists from seven countries got together at the First International Congress on Air Pollution for a two-day session to swap ideas about the world's rapidly smogging lower atmosphere.

The meeting was part of the big 75th birthday party that the American Society of Mechanical Engineers has been throwing for itself in New York.

• **Worst**—To some Americans who may think of dank and filthy air as a native product, the deep interest of much of the world in air pollution might come as a surprise. But in spite of the great Los Angeles blackout (BW—Oct. 30 '54, p30), it is Britain, and not the U.S., that has been most spectacularly plagued.

In December, 1952, during a stretch of peculiar weather in London, statisticians noted an alarming jump in the death rate. In all, there were about 4,000 more deaths than would normally be expected. After investigation, the government rendered its verdict: death by smog held in and compressed by London's foggy skies.

The greatest similar tragedy in the U.S. occurred in 1948, when 20 people and a large number of animals died in the industrial town of Donora, Pa.

• **Sulfur**—Most of the papers read at the Congress were professional exchanges of scientific information and ideas. One session, though, brought a spate of general speculation on the subject of sulfur—which was billed as a major factor in air pollution and the one that's hardest to do anything about. The exchange of views boiled down to this.

Sulfur dioxide can be removed—and in some cases is being removed—from the exhaust gases of refineries, steel mills, and chemical plants. But it's a tricky and expensive process; and as long as the U.S. has plentiful natural sources of sulfur, no one would seriously suggest that smog purification will pay for itself. But some day sulfur will run short. When that happens, recovering sulfur from industrial gases will become an economic necessity, and what is now a big money drain may turn into a profitable business.



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Fancy Lab to Test Turbines

Building big turbines used to be simple. But today's complexities prompt Westinghouse to set up an instrument-packed test center.

This engineer is testing fuel injection nozzles in a specially constructed rig that shows him which nozzle designs will give him the best fuel-air injection patterns. The equipment he's using is one of the many test units that pack the new turbine laboratory dedicated last week by Westinghouse Electric Corp. in Lester, Pa.

The laboratory was built to give engineers a place to take a searching look at new turbines while they are between the stages of laboratory model and full-scale production unit.

Building a new turbine used to be a relatively simple job. It was possible to go from model to production line without much trouble. But today a new turbine is like a new jet plane: it needs a lot of testing and "debugging" before it's fit to use.

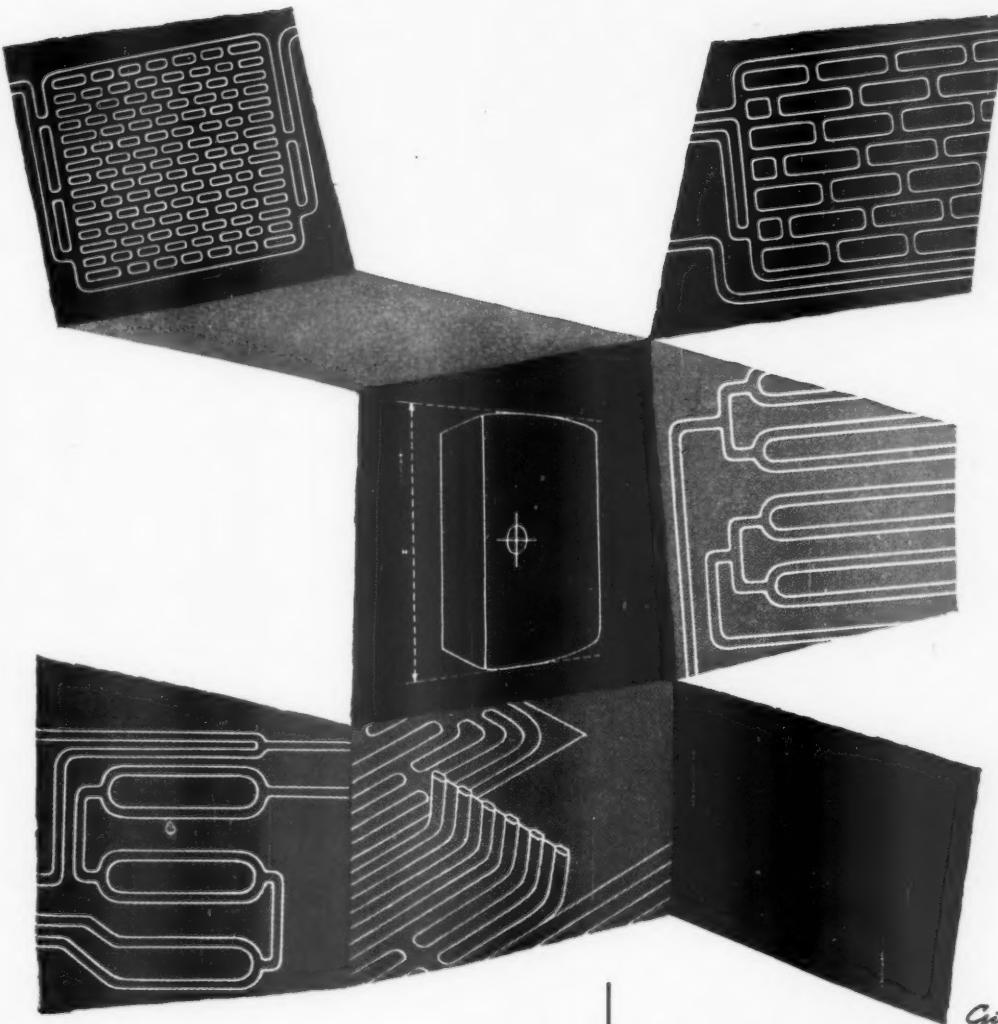
• **Tenfold Jump**—Within the last few years, turbine steam pressures have jumped tenfold. A decade ago, a turbine generator that could put out 165,000 kw. was tops. Now, Westinghouse is putting the finishing touches to a giant that will spin out 275,000 kw. When pressures and capacities reach levels like this, small troubles that wouldn't have amounted to much in old models can blow a modern turbine sky high (BW-Jan. 8 '55, p122). Tolerances shrink, fuel requirements grow more exacting, balance and strength are

harder and harder to achieve. And the problems don't show up on small models—just as problems of jet flight won't show if all you have to test is a rubber-band-driven airplane.

The new Westinghouse lab, said to be unique in the business, has facilities for testing full-scale turbines with capacities up to 15,000 kw. It lifts the company over a major hurdle for, until now, the only way to get test data on a new turbine was to build one using the company's regular production facilities. If the unit turned out to be a dud it might foul up the whole production line.

• **Kicking Theories**—Westinghouse developers will continue to do most of their heavy theorizing at the company's Pittsburgh research center. But the new lab provides them with a place where they can kick a theory around a bit to see if it will hold its shape. Turbines will go through their paces here; so will heat exchangers and air compressors.

One of the lab's first jobs will be to run a test for the Air Force on a scale model of a giant compressor to be used in the wind tunnel laboratories now building at Tullahoma, Tenn. The compressor, which will supply the tunnels with supersonic winds, is described as being the biggest rotating machine in the world.

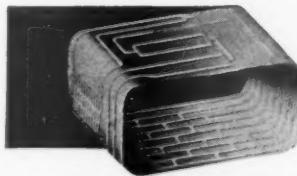


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Ford's Big S

Ford Motor Co. has learned a lot in the past few years about turning around in a hurry. Last fall, the company lost just 10 working days when it switched from '54 models to the new '55s. This was the quickest, most complete change-over in recent Ford history (BW-Nov. 13'54, p82).



LAST FORD to roll off line at Richmond was a Fairlane. Time: 1 p.m. Thursday, Feb. 24. First machinery left for San Jose plant day before.



1 Workers disconnected, cleaned up their tools when last Ford body passed by.



3 This truck arrived at the San Jose plant at 8 p.m. Thursday. Trucks pulled in to new plant at all hours.



4 Color-code card system enabled drivers to get equipment in right spot.



Big

Switch Is a Fast One

Last week, Ford switched plants. It shifted its northern California auto and truck assembly operations—together with a \$7.5-million payroll—from an old plant to a new one, some 50 miles apart. Work days lost: $1\frac{1}{2}$. It was the largest industrial move that has ever been staged in California.

The pictures on these pages show how Ford did it. The move involved 110 truckloads and 130 rail carloads of machinery: parts, engines, components—about 1,600 tons in all. To make it—from the old plant at Richmond to the new plant at Milpitas, near San Jose—Ford spent \$100,000 in cash,



2 First machinery left Richmond on Wednesday, Feb. 23. Plant's 1,350 employees acted as moving men. Some equipment moved by rail.



ROUTE south to San Jose was patrolled by Ford men in borrowed radio cars.



5 Minor problems developed at San Jose. Upside down car frame was one.



FIRST FORD came off San Jose assembly line Monday, Feb. 26, a day ahead of schedule. It got a big No. 1 painted on its windshield.



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SPACIOUS AISLES make it easy for Ford executives to scoot about the new San Jose plant in electric Autoette. Plant contains 1.5-million sq. ft., sprawls over 36 acres.

FORD'S MOVE starts on p. 38

plus about 12 months in working out the plan.

• **Why Move?**—Ford had been a Richmond resident since 1930, when it built the plant to produce Model As. It served well until recent years, when the company's market in northern California began to expand. (Nationally, Ford's registrations totaled just over 600,000 passenger units in 1941. In the same year in California, Ford registrations totaled just over 36,000—about 6% of the national market. But by last year, Ford sales in California had tripled, while its sales nationally had only doubled.)

The old Richmond plant could produce 350 cars per day on a nine-hour shift, and its 1,350 workers had to push hard to reach that figure. A second shift was not practical, because the old plant couldn't be adapted to it.

• **Expansion Out**—Ford considered expanding the old plant, but found that it would actually be cheaper to sell it and move out. An expansion would have cramped production for weeks. With a new plant, on the other hand, the company could keep production going at Richmond until the new plant was ready, then switch quickly. This way, Ford figured, it would lose three working days—between \$2-million and \$3-million worth of cars. As it turned out, the time lost was just about half as much as the company anticipated.

In its new \$50-million assembly plant, Ford has a capacity for 440 cars and trucks a day—880 in two shifts if the race with Chevrolet should be stepped up to that pace. The new plant is nearly three times as large as the old one—1.5-million sq. ft. against the Richmond plant's 563,000 sq. ft.

Because it is bigger—and newer—it will be a more productive unit. The

old plant had become cramped, dingy. Among the workers, there were few regrets on leaving it. Only 15 men from the old plant's 1,350 will not make the move.

• **Early Planning**—Ford announced two years ago that it was going to make the move. It started making plans for last week's move one year ago. William A. Abbott, Jr., the plant manager at Richmond, turned the job over to his traffic manager, Daniel T. McCown.

McCown and a committee of plant management men worked out every detail—from how to identify every piece of equipment, to when each man should leave his old post at Richmond and head south for San Jose. Many men punched in for work at Richmond on Thursday morning Feb. 24, punched out that night in San Jose.

Far back in the supply pipeline, components manufacturers in the East began weeks ago to divert their shipments of engines, tires, body panels, wheels, frames. McCown's crew worked out this schedule, which reduced to a minimum the volume of stock that had to be moved. Also, it gave the new plant a supply to fill the conveyor lines and stock bins in preparation for assembly operations.

• **The Move**—It takes about 27 hours to put a Ford together, so equipment for the primary operations could start moving that long before equipment for later operations went down. The fulcrum of the whole transfer was the time at which the last car would leave the Richmond assembly line. This was set for 3:12 p.m., Thursday, Feb. 24.

Working back from that hour, the body department knew that it could begin to tear down the huge body welding bucks by 1 p.m. Wednesday, Feb. 23. By 3 p.m. Wednesday, the



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PLANNING the big move was Daniel T. McCown, seated left, plant traffic manager.

FORDS MOVE starts on p. 50

first buck was uprooted, loaded on a flatbed truck, and sent off to San Jose.

As the body bucks moved out, the welders cleaned, tagged, and packed their tools. Then they punched out and left for the new plant.

To avoid as much down time for the 1,350 employees as possible—and also to be sure of adequate help in the transfer—the company pressed its production people into service as helpers.

Like the welders, the hourly workers in all the other successive operations knocked off when the last engine, or instrument panel, or door frame had passed their station.

By Wednesday night—the day before the last car would roll out of Richmond—only one line was still in operation. This was the crew that would put the last touches on the last Richmond built car: the body trim line. Before noon on Thursday, they had finished their job, and were ready to move too.

By 1 p.m. Thursday, the last car had come off the old assembly line—two hours ahead of schedule.

• **Avoiding Confusion**—With thousands of items to be moved, the possibilities of confusion were many. Indeed, the greatest threat to the schedule was the danger that, say, the filing cabinet from quality control would wind up in the office of the paint foreman, or that the welding guns would be delivered to the cushion department. If tools were misplaced, it could take days to find them in the new plant's 36 acres.

To avoid this, McCown devised a series of serial-numbered, color-coded shipping tags. Each group in the series had a distinctive color—one for each of six departments. Each tag was printed in triplicate: one copy to stay at Richmond, one for the department's record, and the third wired to the equipment being shipped.

On each tag was noted a full description of the equipment: manufacturer's name, serial number, model number, and a company tag number, plus its precise destination at San José. To further minimize confusion, trucks generally carried shipments bearing only one tag number. That way, a machine that was properly tagged was bound to land within 50 feet of the spot where it would be used.

Inevitably, there were blunders. One boxcar that was opened at the new plant was loaded with parts for the Thunderbird, Ford's new sports car. The new plant won't assemble Thunderbirds. But there were no blunders that snagged the schedule.

• **The Route**—A fixed route that flanked the San Francisco Bay was laid out for the trucks (page 51). Except for emergencies or breakdowns, each driver was instructed to make just one stop—for coffee—along the 51-mile route. Ford men in borrowed Pacific Telephone & Telegraph Co. cars, equipped with radiotelephone, patrolled the route constantly to watch for breakdowns. There were none.

Traffic control at the Richmond plant kept careful tab on the departure of each truck and rail car, phoned the time to San Jose so that unloaders there would be ready to handle it.

At San Jose, a battery of forklift trucks and flatbed dollies was mobilized for the arrival of each truck. The forklifts unloaded the trucks onto the flatbeds, which, in turn, were hauled in-train from the loading dock to the appropriate department.

By Friday night, the Richmond plant had been cleaned out of all essential machinery and furniture.

But there were still many things to be done at San Jose. Machinery had to be installed, tools hooked up, supply bins stocked. Most of this work was done over the weekend.

According to the original plan, Ford would start work on subassemblies at San Jose on Monday morning. The first cars were scheduled to roll off the new assembly line on Tuesday morning.

• **Early Celebration**—But things worked out better than expected. A celebration, scheduled for Tuesday, had to be re-scheduled for Monday. That's when the first car rolled out. (It was a station wagon; a San Jose bank bought it.)

At the moment, the new plant is the largest in the Ford system. (Its potential capacity is about $2\frac{1}{2}$ times that of Ford's assembly plant in southern California, at Long Beach.) But it won't be the largest for long. Later this year, Ford will spring open another assembly plant that will be just as big—Louisville, Ky.—and still another that will be bigger—at Mahwah, N.J.



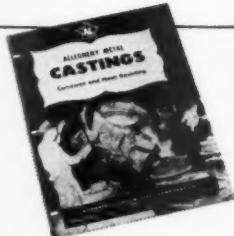
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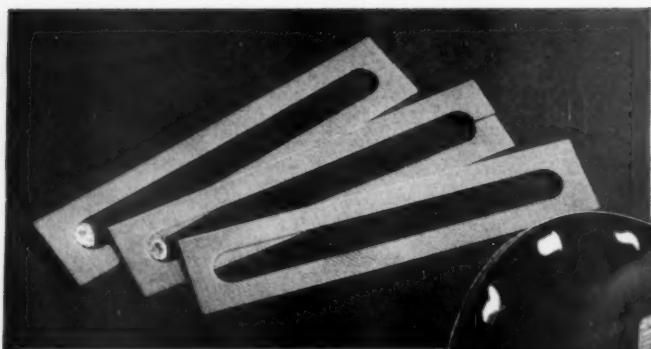
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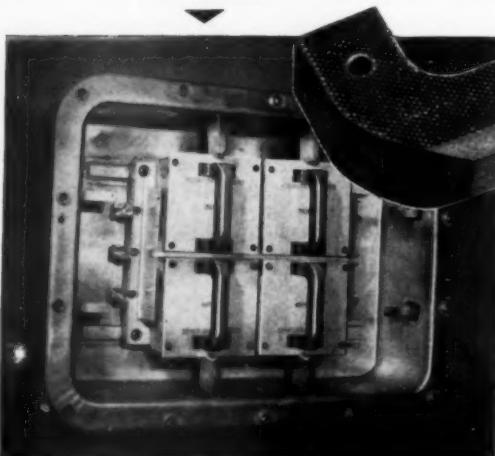


Heat resistance of insulation is of major importance in this DC generator for aircraft use. Airblast cooled, it produces a lot of kilowatts for its small size. Taylor GSC Silicone Laminates give dependable insulation of rotor windings that operate at temperatures far beyond the capabilities of usual plastics.



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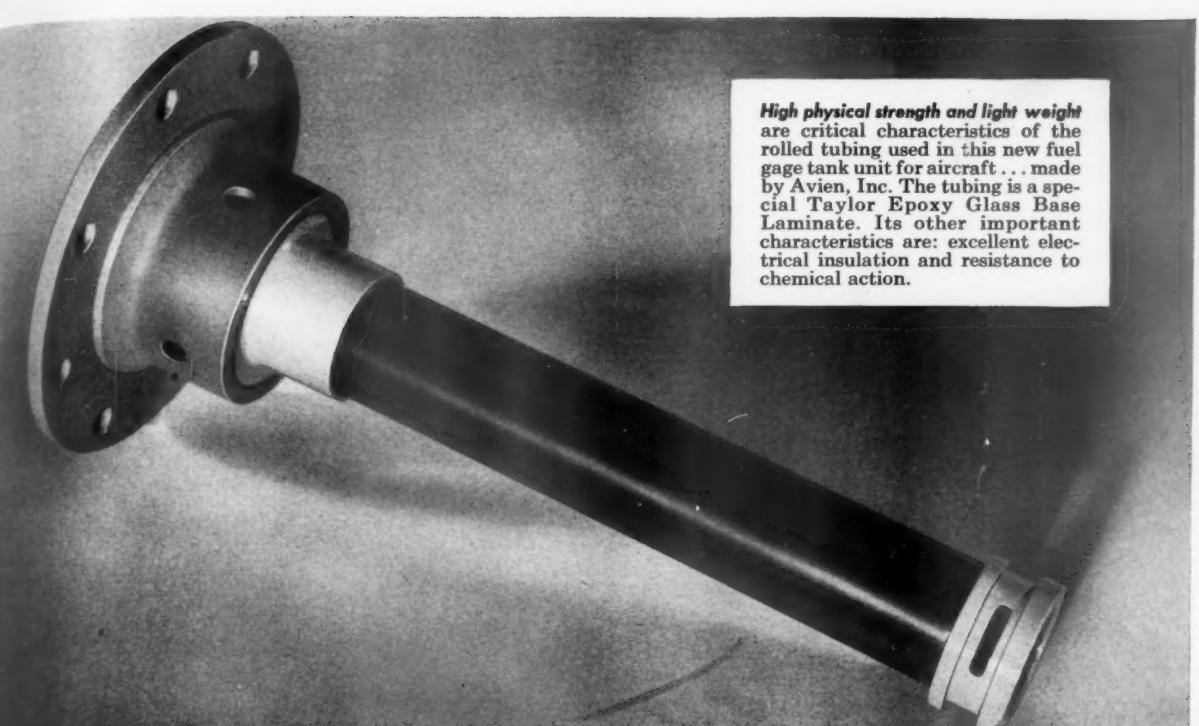
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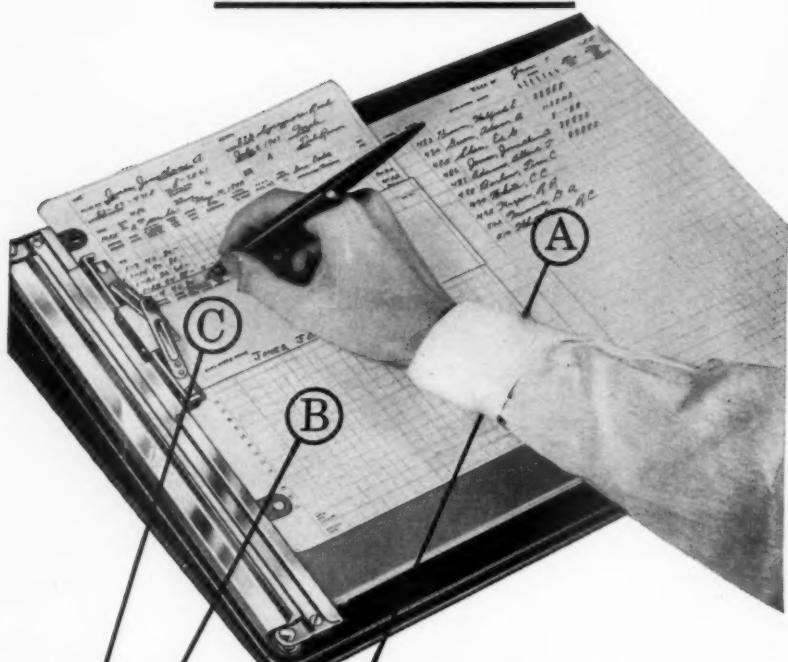
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Boeing Wins

The Air Force award of \$460-million worth of jet tanker work puts Boeing in front for jet transports.

Boeing Airplane Co. of Seattle will be the first American manufacturer with a jet airliner for commercial travel. Last week, Boeing got the jump on its rivals by bagging a contract to build jet tankers for the Air Force. These are the planes that will refuel bombers and fighters in flight.

Competition has been hot since last year, when the Air Force asked for ideas on jet tanker design. Five companies submitted entries: Boeing, Lockheed, Douglas, Convair, and Fairchild. Since then, the industry has known that the company—or companies—that landed the jet tanker contract would have a big lead in the race for the commercial jet airliner. That company's experience with the tanker would fit neatly with the knowledge it would need to build a commercial plane.

• **Nearly Half a Billion—**The Air Force says Boeing will get \$460-million over the next several years. For that, the Air Force will receive "a substantial number" of KC-135 jet tankers. The exact number was not disclosed; one unofficial source estimates that it will be at least 200.

According to trade rumors, Boeing had already received contracts last summer for 88 jet tankers. The Air Force will not confirm this number, but it did say last week that Boeing had previously received \$240-million in orders for the plane. These orders were placed when the Air Force decided to order a limited number of KC-135s before deciding which manufacturer—or manufacturers—would get the large volume order for tankers.

• **Sensation—**Last week's Air Force decision rocked the aircraft industry. Few people expected that Boeing would be the sole contractor. Rather, Boeing was expected to receive just a portion of the order, probably the largest portion, and at least one other firm—perhaps several—would mop up the rest.

Weeks ago, Lockheed and Douglas had indicated that they weren't making any moves toward developing their own jet transports until the Air Force tanker question had been settled. There was some bitterness within both companies when the Air Force decision came out, though Lockheed had less to grumble about. The Air Force announced that the company had received a development contract for an advanced jet tanker.

• **Jackpot—**For Boeing, it's like hitting

A New Field of Federal Regulation

A question of prime importance with which Congress will be called upon to deal at this session is the economic status of one of the country's major industries—the production of natural gas. Shall the competitive and hazardous business of natural-gas production be regulated as a public utility, or shall it be allowed to operate under the rules of private competitive enterprise? The continued vitality and growth of this dynamic industry, and of others as well, may hinge upon the answer.

The question arose as the result of a Supreme Court decision. The Court ruled that the Natural Gas Act of 1938, which gives the Federal Power Commission authority to regulate sales of gas for resale in interstate commerce, applies to sales by independent producers to interstate pipeline companies. Section 1 (b) of the Act reads: "The provision of this Act . . . shall not apply . . . to the production or gathering of natural gas." For sixteen years it had been generally supposed, and the Commission itself had repeatedly ruled, that this exemption covered sales by producers and gatherers not affiliated with the interstate pipeline companies. The Court's decision, which reversed one of the Commission's rulings, upset this established belief and the practices based upon it.

Threatened Damage

The strength of the opposition to Federal regulation of natural-gas production is based upon the belief that it is not only unnecessary but positively detrimental. Exceptional risks can be taken only when there is a reasonable prospect of corresponding rewards to the successful. Unless these risks are taken, new natural-gas reserves in sufficient amounts cannot be found.

As for producers, they will be caught between two types of regulation aimed at two different objectives. There may well be a clash of jurisdictions, placing the pro-

ducer in a position where he cannot comply with one without violating the other. Moreover, artificially low prices are undesirable from the viewpoint of conservation, for they encourage the use of an exhaustible natural resource for purposes in which other fuels can be used and might be more economical in a regime of free markets.

The industry has reacted vigorously. The Supreme Court has been petitioned to review its decision. The Commission has been requested to reconsider the validity, necessity and practicality of its orders. Congress is being asked to amend the Natural Gas Act so as to establish beyond doubt the exemption of producers and gatherers from its provisions.

The immediate loss and injustice to natural-gas producers are serious enough, but the questions involved in Federal regulation strike even deeper. A vital industry is threatened with creeping paralysis. A precious natural resource is exposed to the risk of artificially induced wastage. Consumers face the prospect of effects on price and supply exactly the opposite of those intended. Worst of all, the whole concept of free competitive markets is under attack. If natural-gas production is subject to Federal regulation, no segment of industry entering into interstate commerce is logically exempt. What Congress is being asked to do is not merely to rescue an important industry and its customers from the risk of grave injury, but to reaffirm a basic principle of American politico-economic philosophy.

From the March issue of THE GUARANTY SURVEY, monthly review of business and economic conditions published by Guaranty Trust Company of New York.

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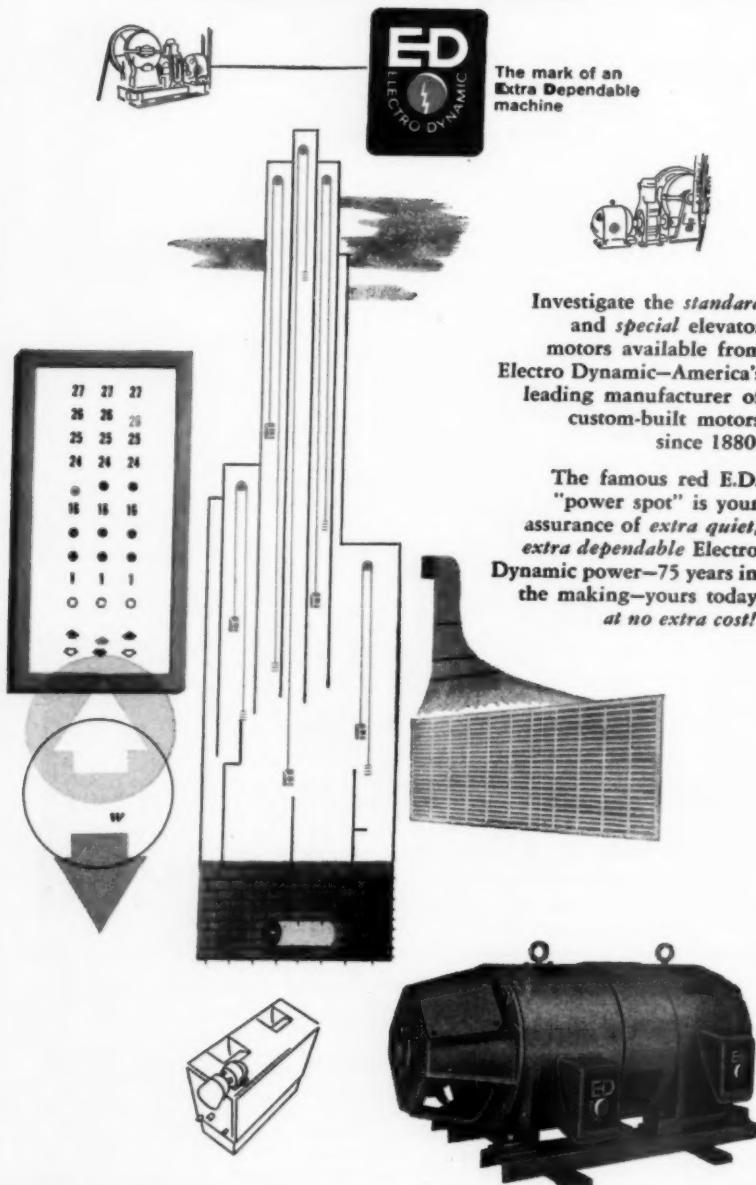
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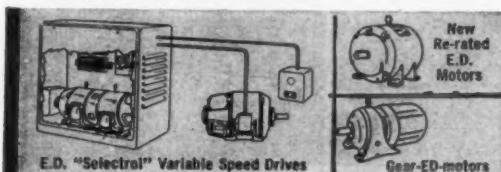


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on a long shot. Back in 1952, the company decided to gamble \$15-million on a jet transport. It cost that much for the company to produce its 707, a prototype jet transport that Boeing showed off early last year (BW-Mar. 5 '54, p112).

There are designers at Douglas who complain that their company should have moved with Boeing on the jet development, instead of plugging so hard at new piston engine designs. Of course, Douglas is sitting pretty now. The company is producing more piston-engine planes for the commercial airlines than any other company. But the designers are thinking about tomorrow, when Boeing's jets may take the edge.

Boeing is already the manufacturer of the Air Force's eight-engine B-52 intercontinental bomber and the B-47 medium bomber—both jets. With the contract for the new KC-135, Boeing may now be in better shape than any other U.S. company for the coming of commercial jets.

• **Specifications Secret**—The Air Force has not disclosed statistics on the KC-135. It is known, however, that it will be several feet longer than the 707, which is 128 ft. long. Otherwise, it will probably follow the 707's specifications closely.

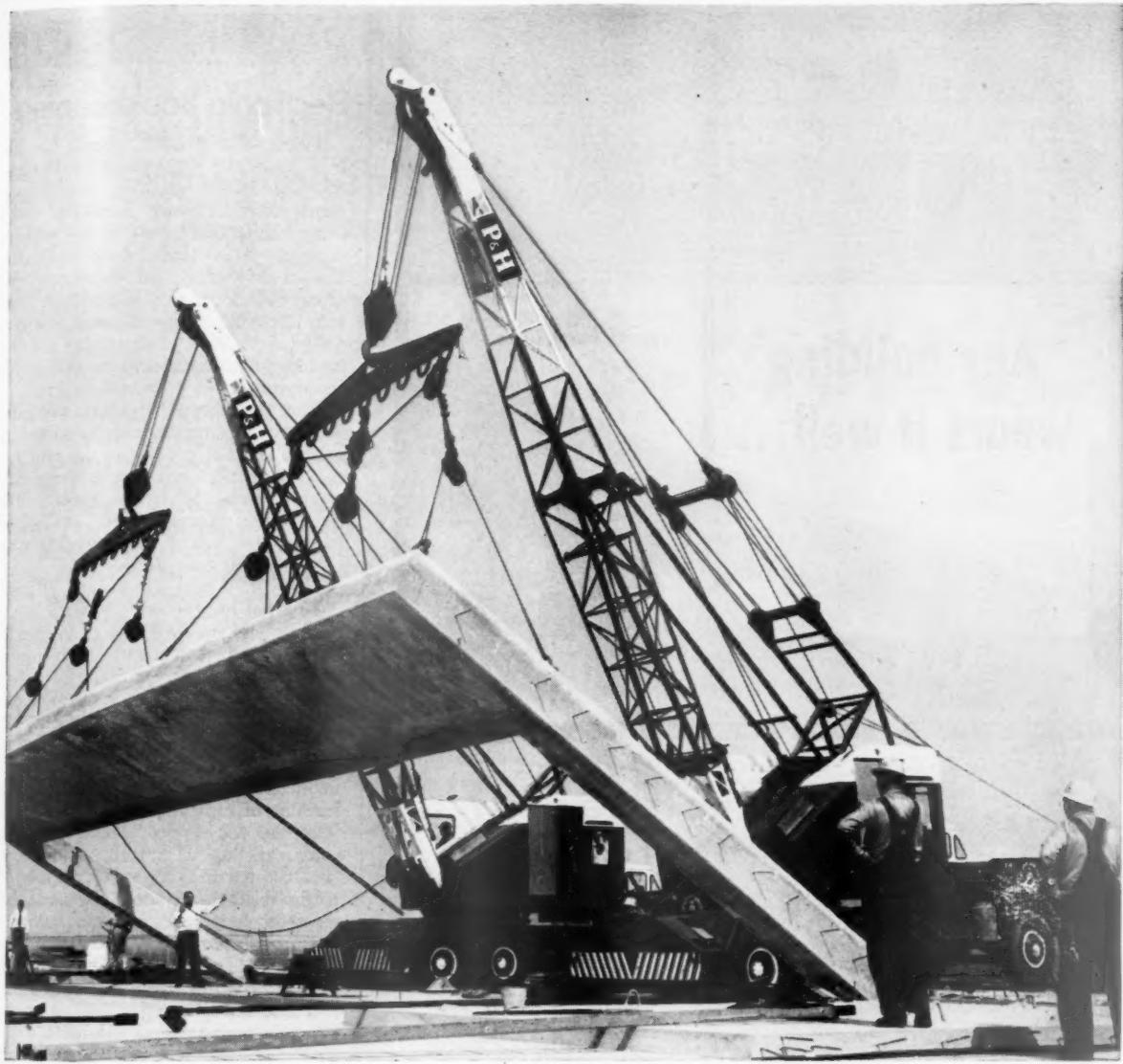
The 707 is capable of speeds of about 550 mph.; the KC-135 will probably have the same speed capability. The 707 weighs 190,000 lb.; the new plane will be heavier. The new plane will be powered by four Pratt & Whitney J-57 engines, the same engines used on the 707. Boeing is expected to deliver its first KC-135 to the Air Force sometime late next year.

PRODUCTION BRIEFS

Boeing's wind tunnel project in Seattle, Wash., is getting a new unit—a \$2-million tunnel that will carry winds going 2,500 mph. and faster. Two steel spheres from which compressed air can be let into the system will provide pressure.

Chrysler will double its output of automatic transmissions, and will build a plant at Kokomo, Ind., to turn out the units. L. L. Colbert, Chrysler president, says the 800,000-sq. ft. building is scheduled for completion this fall.

Milling of lithium near Barraute, Quebec—said to be the world's biggest proven deposit—will start soon. The Quebec Lithium Corp. plans to produce concentrates of the mineral, which is impervious to radioactivity. Lithium Corp. of America has contracted for 165 tons of concentrates daily over a five-year period.



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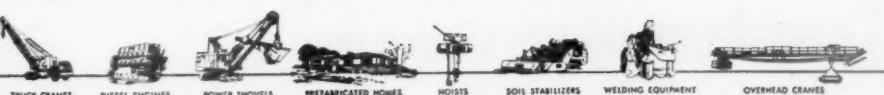
Matter of fact, these same machines — or their smaller brothers in the P&H line — often stay on after the plant is working. To load and unload railroad cars. To handle scrap and bulk materials. To dig, lift,

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NEW PRODUCTS

Electronic Bookkeeping

Twenty-five million people in the U.S. carry the little metal credit identification plates used by big department stores. Some 5-million more carry similar cards issued by one oil company or another. Last week, the Boston company that developed the Charga-Plate and Charga-Matic systems introduced a setup called Scandex, designed to make things easier for the bookkeeping department as well as for the customer.

The Farrington Mfg. Co. will offer Scandex on a rental basis to major oil companies that use the credit card system. If Scandex is a success there, Farrington plans to try to interest the department stores already using its Charga-Plate system (the company says there are 650 such stores).

• How It Works—Customers of companies that use the new electronic bookkeeping system will be given special plastic credit cards with their names and account numbers stamped on in raised letters. When a customer makes a purchase on credit, the service station attendant uses the credit card to print an invoice that shows the customer's name and number, the date, and the amount of purchase.

When the service station sends its cards to the accounting department, they are fed to Scandex. First they go to the scanner—a photoelectric cell that gives off patterns of electrical impulses whenever it "reads" something. The number "five" for instance, will produce a unique pattern of impulses.

These tell-tale pulses are fed to the system's memory and judgment unit—the interpreter. The interpreter analyzes the pulses and decides what they mean. It also inspects the number on the original invoice to see if it is correct. When all the digits of an account number are added together, they produce a two-digit number. If the account number is one actually assigned by the company, the sum of these two digits will always be the same. If it isn't, the interpreter knows there's something wrong, and rejects the card.

If the card is O.K., the interpreter gives a go-ahead signal, and an IBM machine stamps the original invoice card, according to directions from the interpreter. The card is then ready for automatic filing.

• Advantages—According to Farrington, this is the first system that automatically handles the original invoice from the point of sale straight through the accounting procedure.

The Scandex system reportedly can

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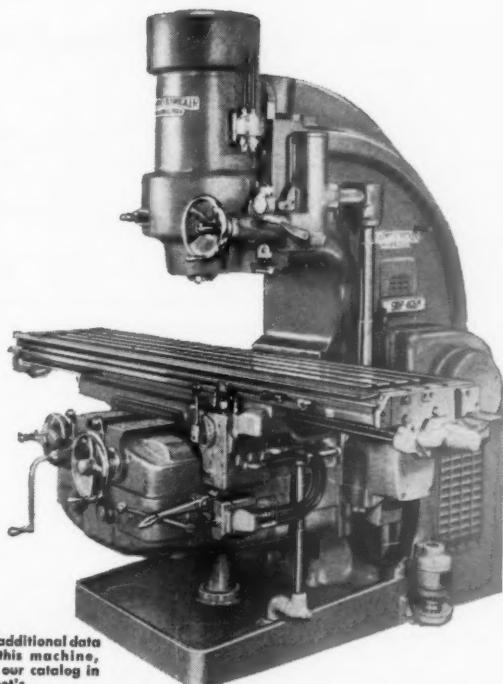
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For complete information on Tool-Lease, see your Kearney & Trecker representative or mail coupon to Kearney & Trecker Corp., 6784 W. National Avenue, Milwaukee 14, Wisconsin.



For additional data on this machine, see our catalog in Sweet's.

MACHINE TOOL OBSOLESCENCE IS BECOMING CRITICAL WHERE DO YOU STAND?

Electrical Equipment Industry — Includes machines for manufacture of wiring, instruments, motors, generators, transformers, switchboards, welders, transport equipment, lamps, radios, television, phonographs, transmitters, telephone-telegraph and other communication gear. Of the 12,207 machines in use today which can be replaced by Tool-Lease equipment — 18% are over 20 years old, 38% are 10 to 20 years old!

Machines over 20 years old, which should definitely be replaced.

Machines 10-20 years old, which should probably be replaced.

Machines less than 10 years old.

1334 automatic and manufacturing type milling machines

10%	38%	42%
-----	-----	-----

4147 vertical milling machines

13%	37%	50%
-----	-----	-----

5319 knee type horizontal milling machines

25%	39%	36%
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725 bed type milling machines

15%	42%	43%
-----	-----	-----

682 horizontal and vertical precision boring machines

37%	63%	
-----	-----	--

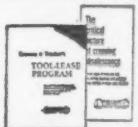
Figures adapted from 1953 American Machinist survey of metalworking industry.

TOOL LEASE



KEARNEY & TRECKER CORP.
6784 W. National Ave., Milwaukee 14, Wis.

Please send me Bulletin TL-10A on Tool-Lease Program and booklet titled "Critical Picture of Creeping Obsolescence."



Name.....
Title.....
Company.....
Address.....
City..... Zone..... State.....



This 270-ft. MHS Tow-Line conveyor

paid for itself
in 5 months

The MHS Tow-Line conveyor shown above has been operating in a Texas motor freight terminal for three years. It paid for itself in the first five months!

The terminal handles 300,000 pounds of freight daily with 125 carts and 15 cart trailers. The manager tells us that dock labor was reduced 30%, and his overage-shortage-and-damage cost—averaging about \$150 a week before installation of the tow-line—is now negligible.

Wherever MHS Tow-Line conveyors have been installed—in food, drug and variety warehouses as well as in freight terminals—efficiency has leaped and costs have nose-dived.

If you are interested in streamlining operations and saving money in terminals or warehouses, you should get all the facts on MHS Tow-Line Conveyors. Write or call!



MHS overhead tow-line conveyor is making big savings possible in this Chicago food warehouse.

Mechanical Handling Systems Inc.

AND SUBSIDIARIES

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process invoices three times as fast as a human being. It will be rented to its users for \$1,080 a month.

- Source: Farrington Mfg. Co., 76 Atherton St., Boston 30.

NEW PRODUCTS BRIEFS

Driverless tractor trains may roll solemnly through industrial plants and shipping rooms in the not too distant future. Guide-O-Matic industrial truck, made by Barrett-Cravens Co., 628 Dundee Rd., Northbrook, Ill., has an electronic "sniffer," which follows signals given out by overhead guide wire systems. A number of routes can be laid out, and the truck will follow the selected one.

No known solvent will eat away the tough plastic coat produced by Glascote. That's what the makers, Ev-R-Shield Products, Inc., Joppa, Md., claim for their "liquid tile." Glascote can be applied with brush, spraygun, or roller to porous surfaces. The coating is a thermal setting plastic, contains a hardener that chemically generates enough heat to bake Glascote to a tile finish.

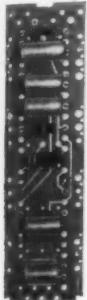
A successful wing-flapping model bird has been put together by Orthopter Co., 1820 Lawrence St., Denver 2. Early flying machines tried to stay aloft by waving their wings. Orthopter claims that its little model is the first to succeed. No price yet, but it will probably run around \$1.20.



Tiny Oil Refinery

This little still at Elgin National Watch Co., Elgin, Ill., brews the world's costliest oil: \$7,560 a gal. Two drops of this stuff will oil 1,100 watches. The still's annual output would oil all the watches made in the U. S. in a year.

WORLD'S MOST REVOLUTIONARY ASSEMBLY LINE?



This is *Autofab*, the new machine developed by General Mills for assembling electronic circuits automatically. It assembles these printed circuits, complete with a variety of electronic components, at the rate of 20 a minute. That's 9,600 completed assemblies in an 8-hour day! And *Autofab* is accurate —does its own "inspecting" and delivers none but perfect, usable assemblies.

Autofab's first assignment is defense work. It's helping IBM build huge air defense computers for the Air Force faster and at less cost. But other units will soon be available for assembling printed circuits used in radios, television sets and other electronic products.

Autofab is another example of the creative engineering and precision craftsmanship found at the Mechanical Division of General Mills.

HAVE YOU A PROBLEM in these fields?

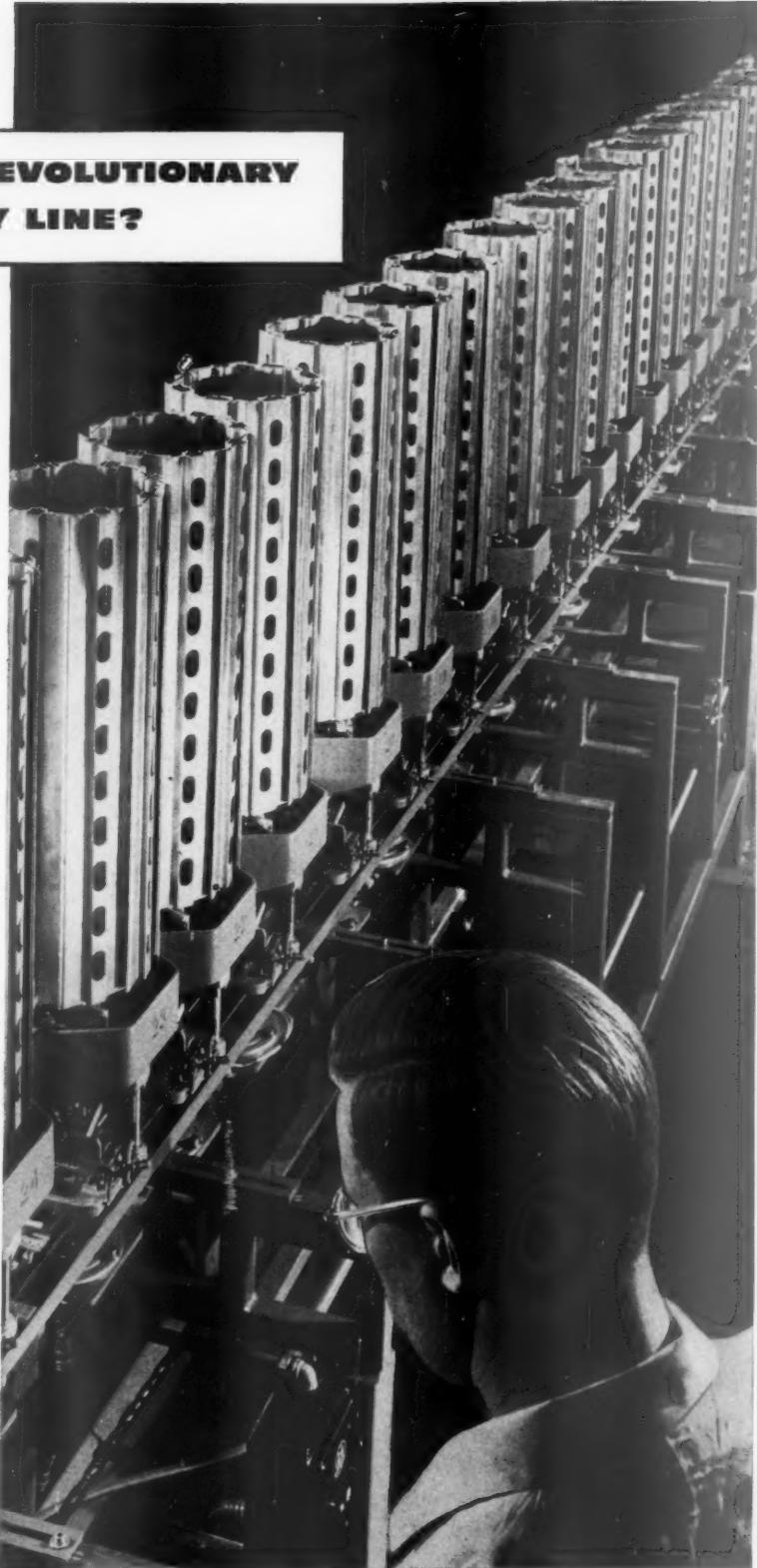
General Mills can help you with electronic and electro-mechanical research, design, development, production engineering and precision manufacturing in connection with...

- automation aircraft systems industrial instrumentation and control
- specialized precision instrumentation navigation and missile control systems
- electro-mechanical computers remotely-controlled manipulators
- telemetering (radio and wire)
- fine-particle technology meteorological and high-altitude research.

HAVE YOU SENT for your free copy of this interesting booklet? It tells all about the services available to you at the Mechanical Division. Just write us on your company letterhead. Address Dept. B-5, Mechanical Division of General Mills, 1620 Central Avenue, Minneapolis 13, Minnesota.



Autofab is a G.M.I. trademark.



MECHANICAL DIVISION OF General Mills, Inc.

RESEARCH



BIOLOGIST Don Moore examines a clam retrieved by skin-diving. He's classifying the marine life along the Gulf Coast for Shell Oil's research department.



SAMPLE BAG in hand, he has covered 1,000 miles of beach from Texas to Florida.

Scientific

The once leisurely art of beachcombing is going scientific. Major oil companies are behind the move. They are hiring young researchers to pick up and classify marine specimens washed ashore on the desolate beaches of the Gulf of Mexico. Scientific beachcombers are also given frog-man training so that they can probe in deeper water.

The oil companies believe these sea creatures may provide clues about buried limestone reefs or sand bars saturated with oil that were sealed millions of years ago by oil-tight sediments.

• **Back to Fossils**—The premise is that the creatures inhabiting the Gulf's Con-



BARNACLES attached to a picnicker's discarded bottle are food for study.



FROM A BOAT, he probes the shallow waters of the Caribbean with this claw-like tool, called a bottom sampler.



OLD RESIDENTS like this lighthouse-keeper are a good source of information about the marine life of a locality.

Beachcomber Prospects for Oil

tinental Shelf today aren't very different from their fossil ancestors who lived eons ago. Each species has its own preference for sand, mud, or shell bottom, and geologists figure that they may be able to match the beachcombers' samples with ancient fossils that come up when oil wells are drilled.

• **Work for Oil Company**—One of the most exhaustive and exhausting surveys to date was made by Don Moore (pictures), a biology graduate student from the University of Miami who collects specimens for Shell Oil Co.

In his search to learn the distribution and types of sea life that inhabits the

bays and shallow waters of the Gulf Coast, Moore combed 1,000 miles of beach from the Mexican border to Tampa, Fla. He kept careful records of where he found the specimens. Jars containing specimens are now in the hands of scientists at Shell Development Co.'s Exploration & Production Research Div. in Houston, Tex.

• **Fine Art**—Moore's techniques show how the science of beachcombing is developing:

• Like any other beachcomber, he patrolled many miles on foot carrying a sample bag and a clam-digger's rake. Some areas he covered by car.

• In locations where marine life was abundant, he sometimes hired a boat and pulled up samples, using an iron claw known as a bottom sampler. Where boats weren't available, he put on his frogman gear—flippers and mask—to skin-dive for samples.

• Important clues on where to look for specimens were often provided by men like Gerald Curry, caretaker of the Coast Guard's Aransas Pass Lighthouse in Texas. Moore also looked over collections made by other scientific beachcombers, such as the one at the University of Texas Institute of Marine Science at Port Aransas.



THESE PECTEN SHELLS are not very different from fossils a million years old.



TENEBRA, a thin, tapering shell of marine insect, may give clue to where oil is.



MARINE LAB at Port Aransas, Tex., is one of nine that Moore visited on trip.

how safe is your firm from embezzlement?

In all likelihood, not as safe as you think. For continuing investigations of embezzlement cases by fraud prevention authorities indicate that employee dishonesty is a completely unpredictable hazard. It can strike anywhere—in businesses of all types and sizes—and with devastating effect.

By far the most obvious conclusion to be drawn from these studies is that no business enterprise can consider itself safe from embezzlement loss unless it carries adequate *Honesty Insurance*. This is the insurance which indemnifies companies against employee thefts.

If your firm is without this protection, or if your *Honesty Insurance* has not been thoroughly reviewed within the past few years, we urge you to consult the F&D representative in your community. He will be glad to discuss your *Honesty Insurance* needs with you, in complete confidence and without obligation. You can rely on his recommendations because he represents a company which specializes in protecting employers against embezzlement loss.

We also invite you to write for our free booklet, "Embezzlement Controls for Business Enterprises," which describes some of the preventive measures employers can take to reduce the risk of embezzlement.

For the booklet, or the name of the F&D representative nearest you, simply write (on your business letterhead, please) to Department F.

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AFFILIATE: AMERICAN BONDING COMPANY

Zilch, Zumas, and Gerf

You can add them as easily as one, two, three, with the new painless system of learning math. It's the concepts, not the names that count.

High school youngsters, who once had trouble adding two and two, are now doing logarithms with interest and understanding. The new approach in math teaching is cutting out much of the tradition and boredom.

In a country as clearly based on technology as ours, there's a perennial need for people who know the ins and outs of mathematics. But math has never seemed particularly exciting to high school youngsters. The average student will suffer through a required one year course—usually algebra—and then head for greener pastures. The result is that the schools have turned out a couple of generations of Americans who are barely able to add up their own restaurant checks.

• **Artificial Bars**—For at least 50 years educators have talked about stimulating interest in mathematics by doing away with artificial barriers the schools have erected between arithmetic, geometry, algebra, and trigonometry. Now for the first time a real attempt to break with tradition is under way.

The University of Illinois has developed a program to provide students with an understanding of broad mathematical principles rather than a mess of isolated facts to be memorized. Teaching materials are being developed to show relations between algebra, geometry, and trigonometry and to cut out the deadwood. The one-year student gets a wider program with a lot of useful information—far more useful than the traditional first-year algebra course. And the student who hopes to continue with math and perhaps choose engineering as a life work gets a much broader foundation.

The program teaches that the concept itself is important—not the name that we call it. It doesn't matter if you add one, two, three or Zilch, Zumas, Gerf (words thought of for numbers). Students learn that addition or multiplication is just as possible with these new terms as with more conventional ones.

The Illinois plan is now being tried in a dozen classes in five schools, with 15 more schools planning to adopt it next fall. Now using the plan are University High School in Urbana, Ill., and high schools in Barrington, Blue Island, and Perkin, Ill., and Dearborn, Mich.

• **Engineering**—The program grew out of the recommendations of a University committee formed in 1951 to help high schools meet increasing math require-

ments of engineering colleges. Teaching began two years ago. In 1956 when the third year is completed, students will be tested against others who have had four years of conventional high school mathematics.

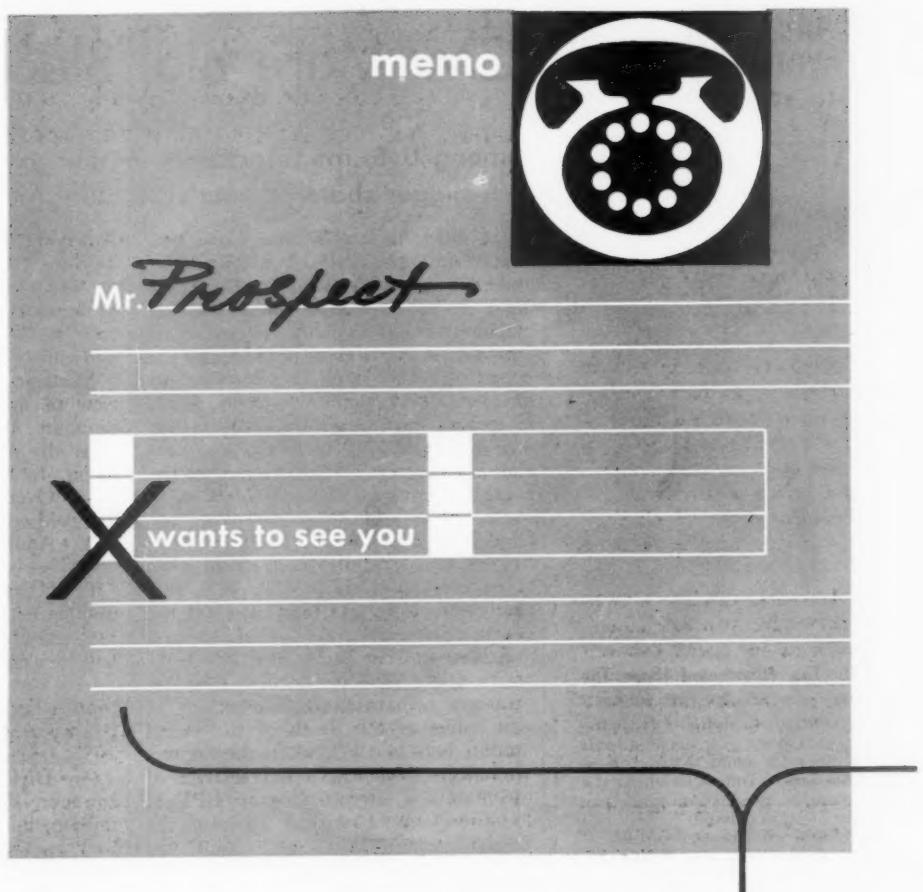
The new program students look as if they'll be the winners because the problems they're working on are right out of the current aviation or electronic age. Even the thinking of electronic brains—devices such as Illinois' Illiac, which can multiply a pair of 13-digit figures by each other 1,000 times in a second—are no secret to these high school mathematicians. The computer works with a binary number system—its electric charges are either plus or minus—and the students work out problems in this system, too.



Blastless Shock Test

The engineer above is studying effects of blasts on buildings without actually exploding a bomb. He's working in the world's largest shock tube, recently completed at Gary, Ind., for the U.S. Air Force. It was designed at Armour Research Foundation.

Here's how it works. Combustible gas is confined behind a light diaphragm in one section of the 150-ft. tube. The diaphragm is shattered when the gas is ignited and a pressure wave travels down the tube to hit a test model. The impact is recorded with electronic equipment. Tests are currently being conducted on a wide range of target items.



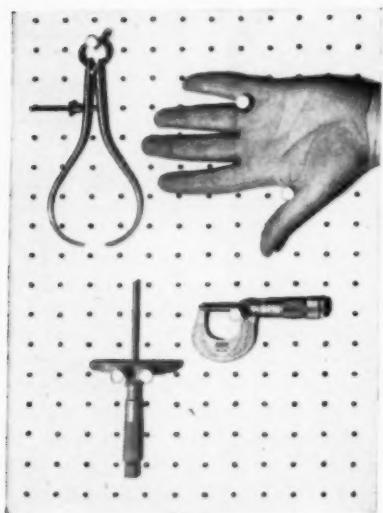
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FINANCE

WHICH OF THESE TOOLS COST YOU THE MOST?



Of All The Tools Illustrated Above, The Most Costly—by far—Are Your Worker's Hands! Your plant probably is spending thousands every year keeping tools and machinery in good shape. O.K.—that makes sense! But, what about the most expensive production tools you use—your workers' hands? Are you risking them on cheap, inefficient profit-stealing, irritating "bargain" soaps?

Industry has too long "hush-hushed" the existence of dermatitis in its plants. Today, intelligent management is bringing this problem out in the open . . . and doing something about it! It might be hard to "put your finger on" the cost of unhealthy hands in your plant . . . but medical case histories by the score underline one fact—it will pay you to look into scientifically formulated skin cleansers.

Here's how you can effect a money-saving, production-saving, dermatitis-free condition in your plant—easy and fast. Let us put our 25 years of specialized "know-how" of industrial skin cleanliness to work for you. Send for descriptive literature offering a valuable SBS program for achieving skin health in your plant—for the very same amount of money you are now spending on ordinary hand soaps! Write to us today.

THE WASHWORD



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Canadian Subsidiary
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GM: More Big, Black Figures

The 1954 figures for General Motors make it tops among U.S. manufacturers in sales and net income—with 5% bigger share of year's shrinking auto market.

In 1954, General Motors Corp. produced just one half of all the automobiles and trucks made in the U.S., had net sales of \$9.8-billion, and net income of \$806-million. These figures make GM the top corporation in the country in all three respects, and its annual report for 1954—made public last week—furnishes impressive reading.

GM upped its share of the auto market last year by 5% in the face of the over-all shrinkage of car sales. Dollar-wise, its sales of \$9.8-billion were second best on record, surpassed only by 1953's \$10-billion. The slimness of the 2% drop below 1953 is remarkable for two reasons: (1) total sales for the industry were off, and (2) GM's defense business was cut back some 29%.

In GM's 1954 net income showing, you get perhaps the classic picture of the effect of the death of the excess profits tax. In 1953, when the tax was in effect, GM had a net income of \$598-million, after paying an EPT of \$192-million. Last year, despite the dip in sales, GM's net income was \$208-million higher than in 1953.

Defense business last year totaled \$1.4-billion, 14% of total sales—well below 1953's mark of 19%. Net unfilled defense orders (the company makes everything from tanks and jet planes to anti-aircraft guns and bombsights) were down to \$1.1-billion at yearend, a decrease of 67% since the beginning of 1953.

• **Finish Line**—Some GM divisions came out better than others on the tally sheet. While over-all the automobile industry suffered from slumping demand—aggravated by the hot sales race between GM and Ford Motor Co., three of GM's five top auto divisions showed sales hikes last year over 1953. Biggest gain was racked up by Oldsmobile, which showed sales up 30% according to GM's figures. Buick was up 12%, Cadillac up 16%, while Chevrolet dipped 3%, Pontiac 11%.

The scorching sales race between Ford and Chevy, which resulted in various gimmicks to claim leadership (page 146), ended on an ambiguous note. Chevy won this week by R. L. Polk & Co. figures. But after Polk subtracts all cars registered in dealers' or manufacturers' names, Ford beats Chevy out by a score of 1,387,344 to 1,362,076. Before subtracting these registrations, Chevy led 1,417,453 to 1,400,440.

- **Bright Spot**—One of the brightest spots in GM's 1954 sales picture was its overseas operations. Unit sales from all foreign markets were up 20% last year, totaling 472,460 units (including cars and trucks).

- **Strategic**—You get an even better view of GM's strategic place in the economy from the opposite angle—what the company does with its sales dollar. In 1954:

- Over \$5-billion, or 51% of sales, was paid out to GM's 21,000 suppliers.

- Another \$2.6-billion, or 28%, went in salaries and wages to GM's 576,667 employees. Both the average number of employees working for GM throughout the world and the total payroll were down slightly from 1953.

- Taxes took a \$1-billion bite, though the death of excess profits kept tax payments about \$200-million under 1953.

- Dividends to GM's 460,000 common shareholders totaled \$436.5-million, and preferred stock dividends took another \$12.9-million. As a percentage GM's payout on common and preferred was the lowest since 1949; the figure fell from 60.5% in 1953 to 55.8% last year.

- Charges for depreciation totaled \$232.9-million in 1954, compared to \$178.3-million in 1953.

- GM plowed back \$356.5-million into the business, against \$236.4-million in 1953.

- A \$75-million chunk of cash went into GM's bonus plan last year. That was a new record for one year, surpassing 1950's \$67.6-million.

- **For Old and Young**—General Motors also has a pension fund, which was worth some \$371-million at the end of 1954. During the year, the company paid \$74.3-million into it. The fund received dividends and interest of \$13.8-million last year, while paying out \$7.2-million to retired employees. Payments of \$14.5-million were made to three insurance companies as GM's share of the separate retirement program for salaried employees.

At the other end of the age scale, GM spent \$2.5-million last year in aid to colleges and universities. It announced just last December that it would up this by \$2-million in 1955, bringing its total to \$4.5-million this year. GM figures that by the time its new support program is under way, 1,400 students and 306 public and



They Move Mountains...and ask for more!

Twenty million tons...a mountain of rock and gravel in California, plus one of iron ore in Minnesota. Sixteen years of hard, rough service and still asking for more!

It's hard to believe that any piece of machinery could last under those conditions and still have at least eight more years of life. But, Rex Belt Conveyor Idlers did exactly that...hauled mountains of material under the roughest type of service, and are still going strong.

The proof? We pulled an idler from the conveyor and took it apart. Physical measurements show it has at

least eight more years of life. Find it hard to believe? We can prove it! We'll be happy to send you the complete data.

This story is typical of the service you can expect from Rex Belt Conveyor Idlers and other products of CHAIN Belt Company. For equipment that speeds production, improves efficiency and reduces costs, the specialized services and products of CHAIN Belt may be able to help you. Write CHAIN Belt Company, 4726 W. Greenfield Avenue, Milwaukee 1, Wisconsin.

Industry looks to

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It takes up less than two square feet of floor space on desk or table . . . can be used under normal lighting at any time by anyone in the office.

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private schools will be receiving GM dollars.

- **New Capital**—GM's total assets stood at a record \$5-billion at the end of 1954, and its demands for new capital to keep its tremendous plant going likewise reached record levels. Capital expenditures totaled \$737-million last year; in 1955, the figure is expected to be \$500-million.

Since 1949, the company has retained about \$1.5-billion in earnings for working capital and plant expenditures. Early last year the sale of \$300-million of 25 year 3½% debentures netted it another \$298.5-million. In January of this year, GM directors announced a new issue of common stock on a 1-for-20 basis to present stockholders (BW-Jan. 15 '55, p120). This offering, which expired this week, is expected to bring in another \$325-million for GM.

- **Ratios**—Despite the \$298.5-million transfusion from the bond sale, GM's ratio of current assets to current liabilities at the end of 1954 was 1.67 to 1—up from 1953's 1.57 to 1 but not much better than 1952's 1.65 to 1. Back in 1950, when the company enjoyed its top unit-sales year, the ratio stood at 1.87 to 1. Adding the proceeds of the new common stock issue would bring the ratio up to about 1.85 to 1.

GM's "quick ratio"—cash, government securities, and inventory to current liabilities—tells a similar story. It stood at an even 1 to 1 at the end of last year, better than 1953's 0.9 to 1 but way

under 1950's 1.36 to 1. The addition of the new stock proceeds would pump this ratio up to 1.18 to 1.

Most significant, perhaps, is another ratio. At the end of last year, cash and governments alone totaled 71% of current liabilities—that is, this ratio stood at 0.71-1. In 1950, the top postwar year, current liabilities were covered 1.11 times by cash and governments. Here, too, adding the proceeds of the stock sale changes the picture. Cash and governments then will total 89% of all current liabilities, the second best postwar figure for this ratio.

- **Outlook**—GM also has some optimistic figures on the 1955 sales outlook.

Pres. Harlow H. Curtice has upped his estimates of total U.S. vehicle production from 6.8-million units to 7.5-million units. This would give the industry its second best year and could come close to giving GM its top year in both dollar and unit sales—provided it continues to hold 50% or better of the market.

So far in 1955, GM has sold 542,078 cars, with February sales up 40% over the same month of 1954 and 30% over the previous peak for the month, set in February, 1950. So far this year, industrywide production is running 48% ahead of last year's rate, but unsold stocks in dealers' hands are mounting swiftly, too. As of Feb. 20, stocks stood at 551,000 cars, up 89,000 from January—but still under February, 1954, when 644,000 cars were in dealers' stocks.

Consumers Stick to the Cuff

Credit total falls off slightly from December to January, but the drop is less than usual.

Consumer credit is still riding high.

The total outstanding on Jan. 31 was \$29.7-billion, down only \$441-million from December's record-breaking \$30.1-billion, the Federal Reserve Board reported last week.

Usually the December-to-January drop is much greater, as consumers clasp their pocketbooks more tightly after Christmas gift buying. Last year the December-January decline was \$813-million.

The Jan. 31 figure of \$29.7-billion, incidentally, is the highest on record for the date, nearly \$1-billion above last year.

Other highlights of the FRB's report were:

- Instalment credit, at \$22.4-billion, was only \$31-million below the figure at the end of December. A year ago, the decline was \$351-million. The January figure was up \$600-million from 1954. The continued high rate of credit purchases of automobiles and

electrical appliances was seen as the main factor of strength.

- Auto instalment credit outstanding at the end of January was \$10.5-billion; that's a December-January gain of \$63-million, instead of the normal seasonal decline. A year ago the drop was \$183-million.

- Instalment credit outstanding for other consumer goods, including electrical appliances, was \$5.6-billion, a less-than-seasonal decline of \$59-million from Dec. 31.

- Repair and modernization instalment loans at \$1.6-billion were off \$42-million from December to January, compared with a \$14-million drop a year before.

- Personal loans with instalment repayment were almost \$4.8-billion, a rise of \$7-million over December. A year ago personal loans had shrunk by \$20-million. Personal loans on Jan. 31 stood \$448-million above the 1954 date.

- Non-instalment loans followed



This Point is Not Exaggerated

Spare the rod (quality-wise), and you may spoil the brain-child of the product designer.

This point is well taken by many manufacturers who fabricate Brass Rod into component parts for pens and pencils, clocks, lamps, electric and plumbing fixtures, screw machine parts, and what have you. And that's why so many of these manufacturers are what you might call "confirmed addicts" of Bristol Brass Rod.

In pencils, for instance, Bristol "pencil point rod" makes it possible to drill a more concentric hole, with much better uniformity. And all shipments of all Bristol Brass Rod have the same clean surface, uniform gage, and high machinability. (You can say that again, about Bristol Brass strip, coil and wire.)

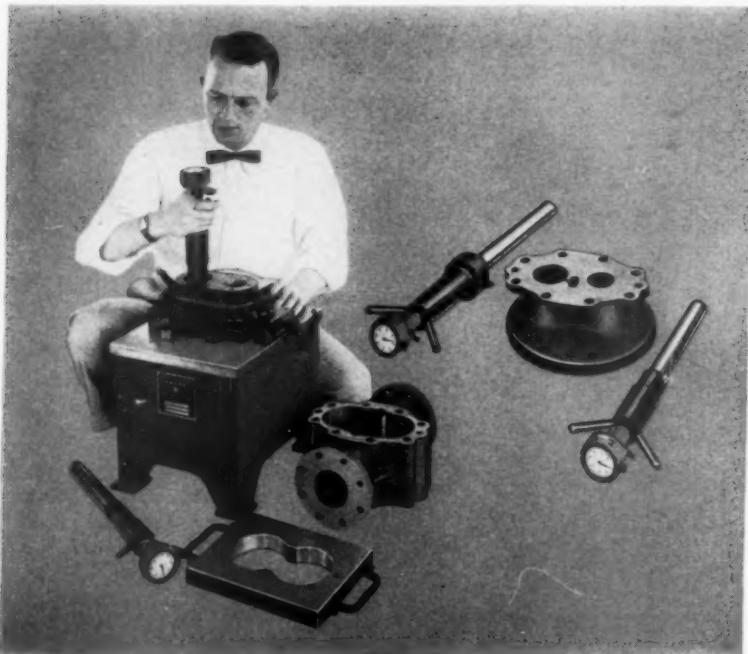
Try it out for yourself. Bristol Sales Engineering Service is airborne . . . at your service any time you say.

And now . . . BRASS FORGINGS, too . . .
The Bristol Brass Corporation announces the acquisition of Accurate Brass Company, 73rd Ave. & 88th St., Brooklyn 27, N.Y.
"How do you know it can't be forged?"

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has been making Brass strip, rod and wire here in Bristol, Connecticut since 1850, and has offices and warehouses in Albany, Boston, Buffalo, Chicago, Cleveland, Detroit, Milwaukee, New York, Philadelphia, Providence, Rochester, Syracuse. The Bristol Brass Corporation of California, 1217 East 6th St., Los Angeles 21. The Bristol Brass Corporation of Ohio, 1607 Broadway, Dayton.

"*Bristol-Fashion*"
means **Brass at its Best**



Gage design differs from tool design in a great many respects.

Gage Design is a Job for Specialists

Why do some firms insist on putting their tool designers on the spot? Why do they expect these highly-skilled specialists to engineer satisfactory gages for special requirements?

There are two reasons. Tool designers have performed wonders in their own field. So their managements understandably have great faith in them. Tool designers, by their very nature, love to solve problems. So, they accept the challenge involved in special gage designing.

It doesn't pay . . . because the experience of the average tool designer does not give him the answers to these questions: Is a *special* gage necessary? *Which* is the best gaging system for the job . . . air, dial indicating, electric or electronic? *How much* will a specially engineered gage cost . . . if required?

Designing machines, fixtures and tools involves holding work-pieces in position by force — trans-

ferring and transforming power to act as wanted—counteracting heavy stresses and strains.

Designing precision gages, however, requires knowledge of how to magnify and transfer measurement variations precisely, without loss of motion — with a minimum of friction and inertia in the working parts — and a hundred other details which do not concern the usual tool and machine designer.

To get the right answers . . . call in your nearby Federal sales engineer. He is backed by thousands of Federal gage designs and can give unbiased advice about air, dial indicating, electric or electronic gages . . . because Federal makes them all.

Our new booklet "A Management Blind Spot" reveals unappreciated shop situations and tells how they can be corrected. For your copy, write

**Federal Products Corporation,
523 Eddy St., Providence 1, R. I.**

Ask **FEDERAL**

FOR ANYTHING IN MODERN GAGES...

Dial Indicating, Air, Electric, or Electronic — for Inspecting, Measuring, Sorting, or Automatically Controlling Dimensions on Machines.

a more normal pattern, dipping substantially from December to January, though the decline was narrower than a year ago. The Jan. 31 total was \$7.2-billion, down \$410-million from December, compared with a drop of \$462-million a year ago.

• Charge accounts at the end of January were \$3.2-billion, a dip of only \$293-million from December, contrasted with a \$409-million drop last year. Charge accounts on Jan. 31 stood \$223-million above a year earlier.

FINANCE BRIEFS

Loans to business by 20 large New York City banks rose \$72-million last week, their fourth straight contraseasonal climb. For the four-week stretch, the loans were up \$186-million, compared with a \$152-million drop in the year before period. Despite these gains, the \$7.5-billion total business loans of the banks are still \$466-million below a year ago.

Joy Mfg. Co., maker of mining equipment, has filed a registration statement for a \$20-million sinking fund debenture issue with the Securities & Exchange Commission. Proceeds would be used to retire bank loans, help finance already-started expansion, and increase working capital.

It's a rail holding company. That's the Interstate Commerce Commission's ruling on the Alleghany Corp., the Robert R. Young holding company that captured the New York Central last year. Thus ICC keeps supervision of Alleghany; the SEC, whose rules for holding companies are stricter than ICC carrier rules, has contended Alleghany is an investment trust and so should be under its supervision.

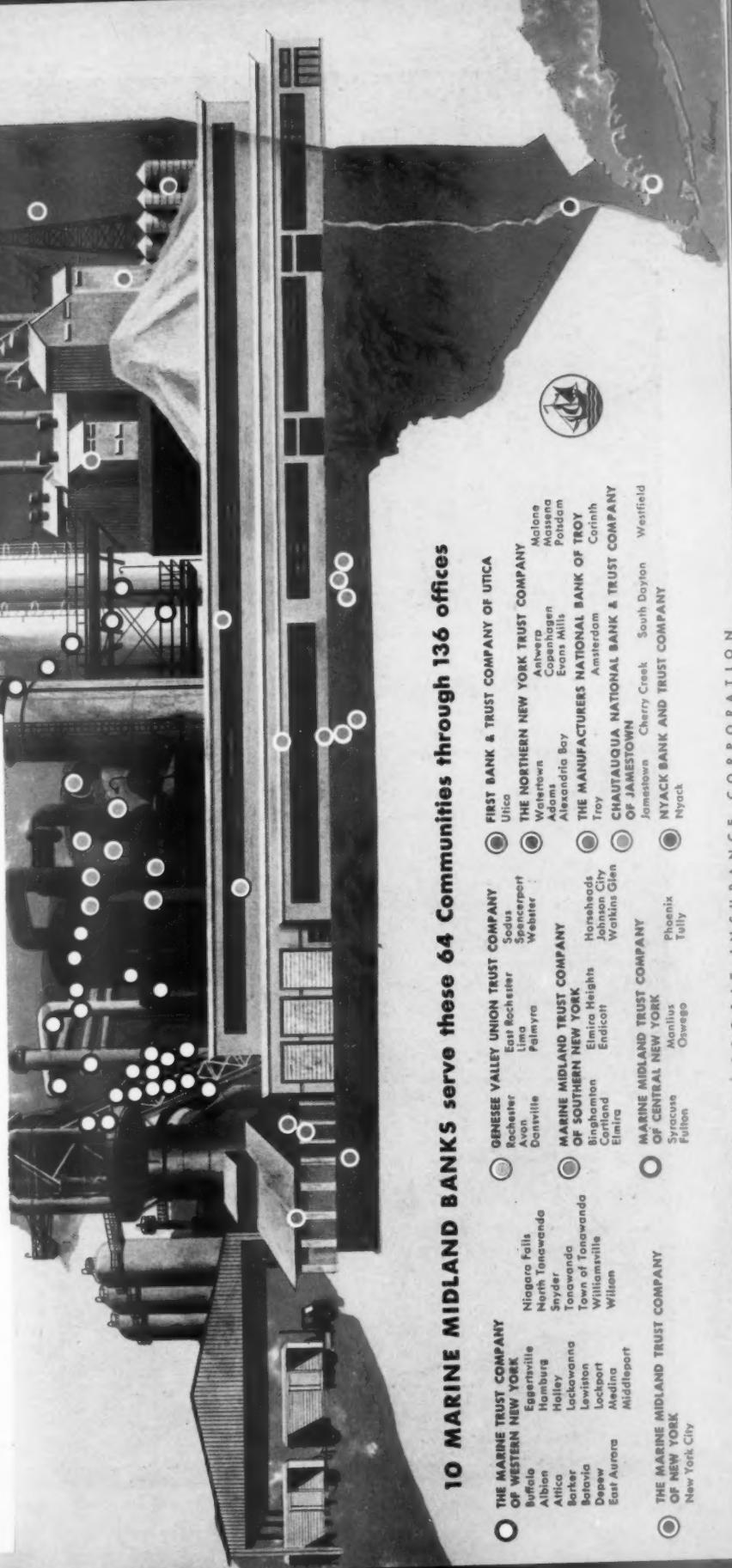
B&O refinancing: The ICC has authorized the Baltimore & Ohio RR to issue \$22.2-million 4% bonds, maturing in 1974 and 1975. The bonds are not to be sold, but will be used as collateral for bank loans at "favorable interest rates," presumably under 4%. The loans, in turn, will be used to buy up outstanding B&O bonds that carry interest rates from 4% to 6%.

Buyers snapped up the \$250-million of debentures offered last week by General Motors Acceptance Corp., but borrowing was more costly to GMAC than it had been in mid-1954. The new offering consisted of \$50-million in five-year 3s, and \$200-million in 17-year 3½s, both offered at par. In July, GMAC had been able to sell a \$150-million batch of 10-year 2½s and 15-year 3s for a shade over par.

MARINE MIDLAND BANKS KNOW NEW YORK The Biggest Industrial State

Ten percent of the United States' population and twenty percent of its factories are located in New York State. This makes New York first in employment and production and literally "The Empire State". Consider these facts in your plans for expansion, either in sales or production.

Many a New York State company, nationally prominent today, can attribute a share of its success to credit wisely extended by its home town bank, often one of the locally managed Marine Midland banks listed below. Take advantage of the trade area knowledge of these banks.



10 MARINE MIDLAND BANKS serve these 64 Communities through 136 offices

THE MARINE TRUST COMPANY OF WESTERN NEW YORK

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Albion
Barker
Batavia
Depew
Lockport
Medina
Middleport
East Aurora

Niagara Falls
North Tonawanda
Snyder
Tonawanda
Town of Tonawanda
Williamsville
Wilson

Jamestown
Cherry Creek
South Dayton
Westfield

NYACK BANK AND TRUST COMPANY
Nyack

GENESEE VALLEY UNION TRUST COMPANY

Rochester
Avon
Denville

Lima
Palmyra

Sodus
Spencerport
Webster

Watertown
Adams
Alexandria Bay

Malone
Watervliet
Albion

Copenhagen
Evans Mills

Potsdam
Corinth

Amsterdam

CHAUTAUQUA NATIONAL BANK & TRUST COMPANY

Troy

Watkins Glen

Johnstown

Cherry Creek

South Dayton

Westfield

FIRST BANK & TRUST COMPANY OF UTICA

Utica

Spencerport

Webster

Watertown

Albion

Alexandria Bay

Malone

Watervliet

Albion

Copenhagen

Evans Mills

Potsdam

Corinth

Amsterdam

THE NORTHERN NEW YORK TRUST COMPANY

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Copenhagen

Evans Mills

Potsdam

Corinth

Amsterdam

THE MANUFACTURERS NATIONAL BANK OF TROY

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Hornell

Endicott

Erling

Watkins Glen

Johnstown

Cherry Creek

South Dayton

Westfield

CHAUTAUQUA NATIONAL BANK & TRUST COMPANY

Watkins Glen

Johnstown

Cherry Creek

South Dayton

Westfield

THE MARINE MIDLAND TRUST COMPANY OF CENTRAL NEW YORK

Syracuse

Manlius

Oswego

Phoenix

Tully



Necklace of Linde Star Rubies and Diamonds worn at the Coronation of H. M. Queen Elizabeth II.

Man-made gems perfect as nature's finest— *created with the aid of photography's keen eye*

Linde Air Products Company measures rare elements as close as 2 parts in a million with the spectrograph to produce star sapphires and star rubies more nearly perfect than natural gems.

Wartime instruments called for millions of synthetic jewel bearings. But supplies from Europe were shut off. So at Uncle Sam's request, Linde, a division of Union Carbide and Carbon Corporation, undertook to create American-made sapphires and rubies—with photography filling a role in the intricate technology.

Postwar, Linde went even further. Using the spectrograph, a photographic instrument so sensi-

tive it can measure the chemical content of celestial bodies, they found just the right trace of rare element to create a deep silky star within the stone and thus achieved the fabulous Linde "Stars"—man-made counterparts of one of nature's rarest gems.

This is the way photography is working in small companies and large, in laboratories, on production lines, in offices and drafting rooms. It is saving time, reducing error, cutting costs, improving production for all kinds of business and industry.

Photography can work for you, too. Some of the ways are listed below. Check them over.

Eastman Kodak Company
Rochester 4, N. Y.

... and here are 16 basic places where Photography can work for you
—5 minutes with this check list can be the soundest business move you've made this year

- Management**—Progress photos, Stockholder reports, Record preservation, Information distribution, Control charts, Organization charts
- Administration**—File debulking, Purchase schedule, Office layout, Interior decoration, Form printing
- Public Relations**—News release, Institutional, Community relations, Public service
- Training and Safety**—Safety campaigns, Teaching, Reports, Fire prevention
- Personnel**—Identification photos, Job description, Orientation, Payroll records, Employee personal records, House organs, Health records, Bulletins
- Service**—Manuals, Parts lists, Installation photos, Training helps, Records
- Research**—Reports, Flow studies, Process charts, Library, Photomicrography, electron-micrography, x-ray diffraction, etc.
- Product Design & Development**—Styling, Consumer testing, Motion studies, Stress analysis, Performance studies
- Purchasing**—Schedules, Duplicate engineering prints, Specifications, Component selection, Source information
- Engineering**—Drawings, Specification sheets, Drawing protection, Pilot radiography
- Production**—Time study, Work methods, Legible drawings, Schedules, Process records
- Testing & Quality Control**—Test set-ups, Reports, Standards library, Radiography, Instrument recording
- Warehousing & Distribution**—Inventory control, Damage records, Waybill duplicates, Flow layouts, Packing & loading records
- Advertising**—Advertisements, Booklets, Displays, Dealer promotion, Television
- Sales**—Portfolios, Dealer helps, Sales talks, Price & delivery information
- Plant Engineering & Maintenance**—Plant layout, Repair proposals, Piping & Wiring installations, Progressive maintenance, Record debulking

These books show how photography is being used today.

Photography in Marketing
Photography in Administration
Photography in Engineering
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when you buy**

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... wonderful things like having a happier, more energetic office working force . . . profitable things, such as saving as much as 25 per cent in office floor space . . . satisfying things like knowing your office furniture problems are over, since with Steelcase your first cost is your only cost. With absolute satisfaction as its golden rule, Steelcase continues to serve the fine companies of America . . . as is has for over forty years.



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GRAND RAPIDS, MICHIGAN

WHENEVER YOU WANT TO MAKE A GOOD OFFICE . . . A LITTLE BETTER

LOCAL BUSINESS

Riders Fret

PHILADELPHIA — A change in management of this city's transit company has riders here expecting a dose of what other cities have been getting—higher fares, elimination of some lines, curtailments on others.

Last week National City Lines, Inc., which owns transit systems in 14 states, took over the management of the Philadelphia Transportation Co. and installed Douglas M. Pratt as president. Pratt had headed the NCL-controlled Baltimore Transit Co. since 1952. His record there was one of good dividends to stockholders—but also of cuts in personnel and service. Before Pratt, Baltimore Transit had not paid a dividend in almost 25 years.

National City Lines had been quietly buying the stock of Philadelphia Transportation for about a year. Just how big its holdings are, NCL won't say, other than to admit they are "very substantial." The new management was made possible by a coalition with older stockholder groups, all of whom have been pressing for more regular dividend payments.

The largest privately owned transit company in the U.S., Philadelphia Transportation has revenues of about \$73-million. It has already applied to the Pennsylvania Public Utilities Commission for a fare hike—to 20¢.

Tunneling into Prison

SALT LAKE CITY—Ore is where you find it, and American Smelting & Refining Co. thinks it has found it on the grounds of nearby Utah State Prison.

The prison is about 20 miles south of Salt Lake City at the end of Salt Lake Valley, which puts it close to mining properties owned by AS&R and about eight miles from Kennecott Copper Corp.'s open-pit copper mine at Bingham. AS&R geologists had traced a fault running onto the prison land, and follow-up tests showed ore was present. Now—after six months of trying—the company has a mineral lease from the state and an O.K. from the Prison Board of Corrections to start drilling.

Plans call for drilling to get under way early in July on part of the 1,000-plus acres covered by the lease. Geologists aren't talking, but copper is one of the main ores believed to be under the prison grounds. Lead and zinc also show up in the general area.

Earlier this year, prison land produced a strike in another part of the country—Michigan. Woodson Oil Co.



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The Canadian International Trade Fair is the place to meet personally the men who can be most useful to you—and face to face is the best way to do business. This is the experience of businessmen who visit the Fair each year.

Here in Canada you have the greatest concentration of key men interested in buying and selling, ever assembled in North America. More than 25,000 businessmen—employers and employees—visited the Trade Fair in 1954. You should plan to come in 1955.

Address requests for information and accommodation to your nearest Canadian Government Trade Office, or The Administrator, Canadian International Trade Fair, Exhibition Park, Toronto, Canada.

8th Annual
**CANADIAN
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TRADE FAIR**

YOUR GATEWAY TO WORLD TRADE



TORONTO
CANADA
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TO
JUNE 10th
1955

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If you use extruded aluminum shapes or tubing as a component, a step in the right direction is to call Wolverine.

You get sound engineering, quality control, years of experience, the workmanship of skilled employees. And you get extruded shapes and tube that meet your specifications, that save you time and money, that help you make a better product.

A good start is to write for a copy of Wolverine's aluminum catalog. Do it—today! WOLVERINE TUBE, 1501 Central Avenue, Detroit 9, Michigan. Plants in Detroit, Michigan and Decatur, Alabama.



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*Manufacturers of Quality-Controlled Tubing
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PRODUCERS OF TUBING AND TUBULAR PRODUCTS OF COPPER,
COPPER-BASE ALLOY, ALUMINUM AND WELDED STEEL.

hit oil at the Detroit House of Correction in Plymouth Township (BW-Jan.15'55,p41). Estimates are that the city may profit by as much as \$60,000 a year from the well.

Catskill Gas Comes In

KINGSTON, N. Y.—The drilling rigs that have been changing the look of Shandaken, a small rural town in the heart of the Catskill Mountains, 30 miles northwest of here, have finally produced something for outsiders to talk about.

Dome Gas & Oil Corp., which has been probing the area, said last week that it had struck natural gas at a depth of 5,360 ft. on a farm in Fox Hollow. Dome says the flow—50,000 cu. ft. a day—is not enough for commercial use yet. But it thinks another 1,000 ft. of drilling may turn up worthwhile quantities. If it does, it will be the first usable deposit uncovered in the Catskills.

The drilling operations have been a topic of talk around Shandaken for more than a year now. At present, the town's main sources of income are summer vacationers and winter skiers, plus some lumbering.

Business Bars Industry

ST. LOUIS—A group of businessmen bought up 823 acres of land here last week—to keep it from being used for business.

The land, in one of St. Louis County's most scenic areas, the Glencoe Hills, was sold several years ago to realtors. They planned to develop it into small industrial tracts and residential areas.

Businessmen who had homes in the area, however, had other ideas. Eventually, they formed a syndicate, raised cash, and last week announced that from now on the acreage would be zoned for homesites. The syndicate's program calls for "land-planning the 823-acre area and putting it to its best use." The tract will probably provide no more than 100 homesites, Charles De Witt, syndicate head, has said.

Earlier, 700 residents of the community signed a petition objecting to zoning the area for heavy industry.

Update

BOSTON—The \$150,000 fund for restoring the hurricane-tipped steeple of Old North Church (BW-Jan.15'55, p41) is over the top.

Colgate-Palmolive Co. finished off the drive last week with a \$10,000 contribution. Several weeks ago a \$30,000 check presented by an industry committee, the brainchild of ACF Industries, Inc., put the campaign in the home stretch.

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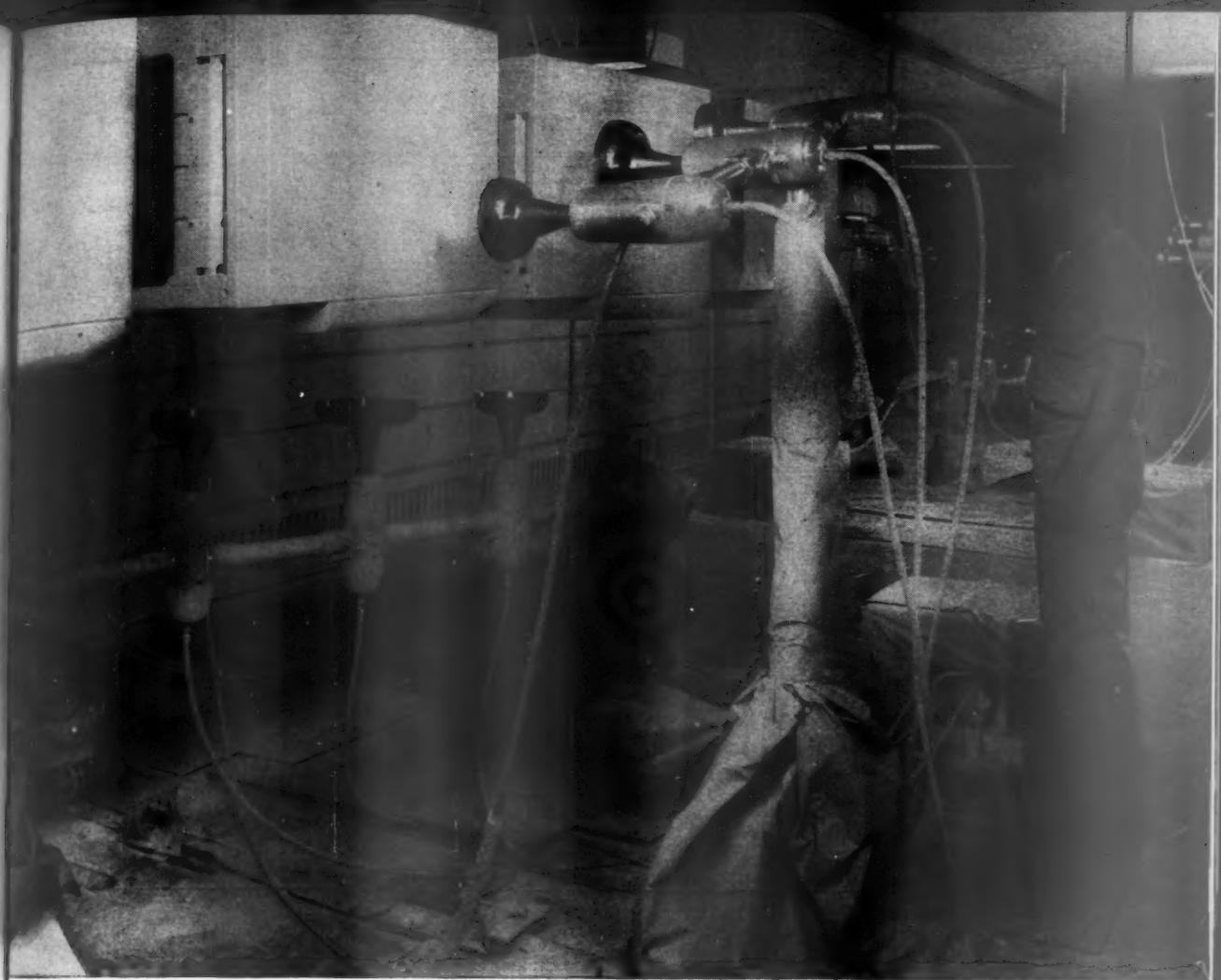
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All-in-One laundry gets One-Two Finish...Fast!

When the Bendix Home Appliances Division of Avco moved to its new plant in Nashville, Glidden Technical Service helped get the new electrostatic spray-finishing line and the primer system going, with fewest headaches. Special Glidden Nubelite finishes were developed to go on smoothly and evenly over the Glidden Nu-Pon flow-coat primer. The need for a second inside-finish coat was eliminated.

This is typical of Glidden Technical Service available to all manufacturers to help them apply Nubelite and Nu-Pon finishes. A letter will bring a Glidden Representative to your plant.



THE GLIDDEN COMPANY

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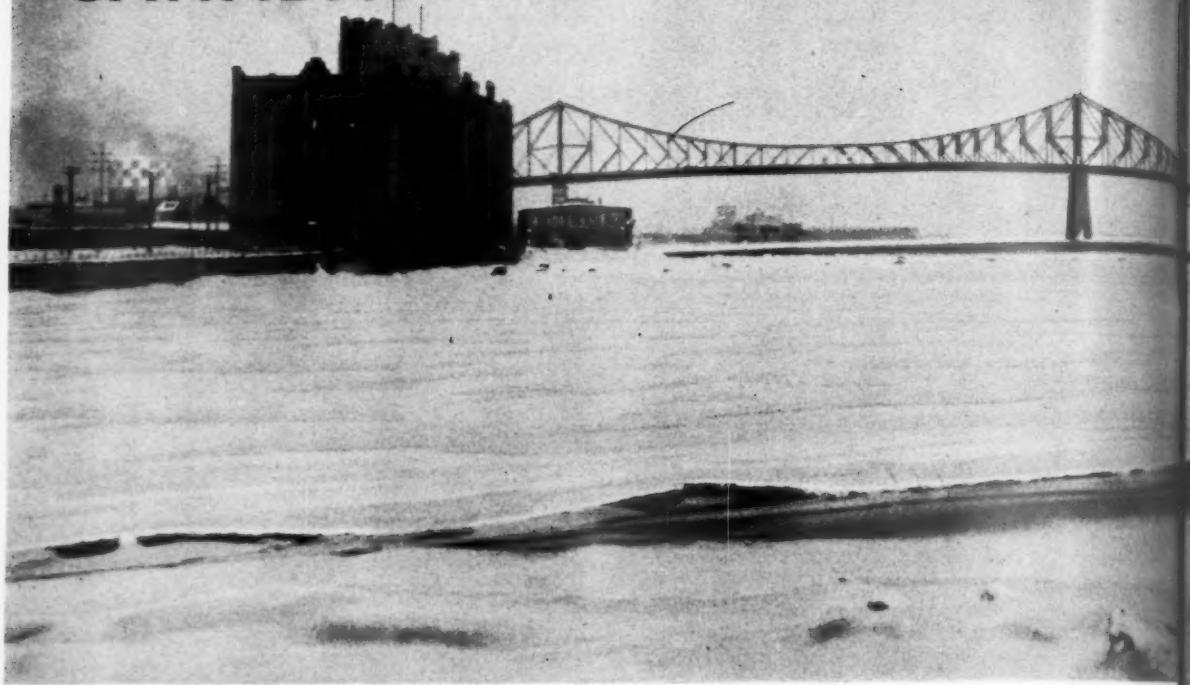
11005 MADISON AVENUE

CLEVELAND 2, OHIO

SALES OFFICES AND FACTORIES:

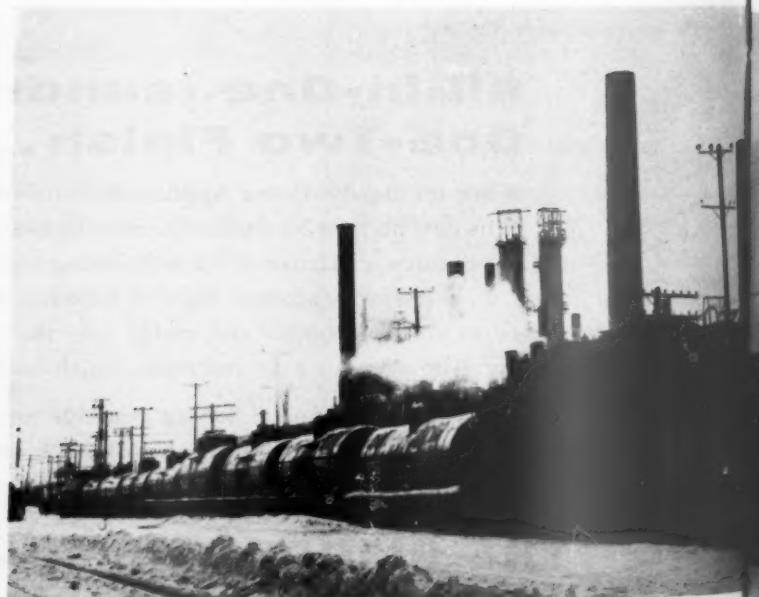
San Francisco, Los Angeles, Chicago (Nubian Division—1855 North LeClaire Avenue), Minneapolis, St. Louis, New Orleans, Cleveland, Atlanta, Reading, Canada: Toronto and Montreal

CANADA

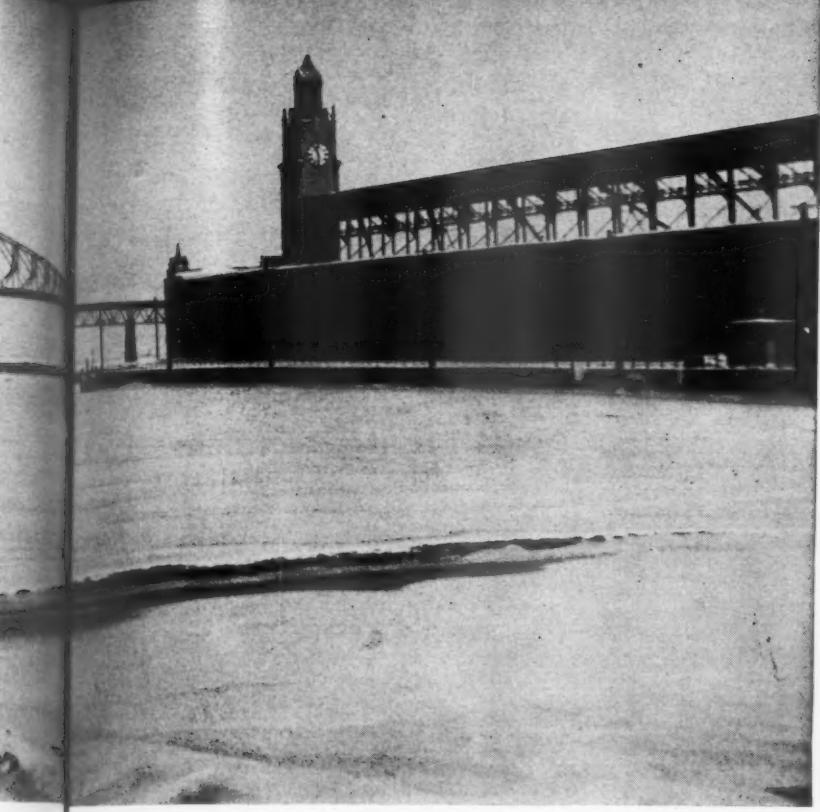


Next month, melting ice in the St. Lawrence River will put one of the world's great seaports back in business. But Montrealers—eying progress on the seaway near the Jacques Cartier Bridge (above)—wonder if they will be bypassed as the ships sail on westward to the Great Lakes.

Seaway Puts M



BUSINESS: St. Catherine's street (left), neon-bright and clogged with cars, is a gay main stem. It's one of a few arteries that serve growing population and industry. Montreal is a refinery center, railway hub, and manufacturing region.

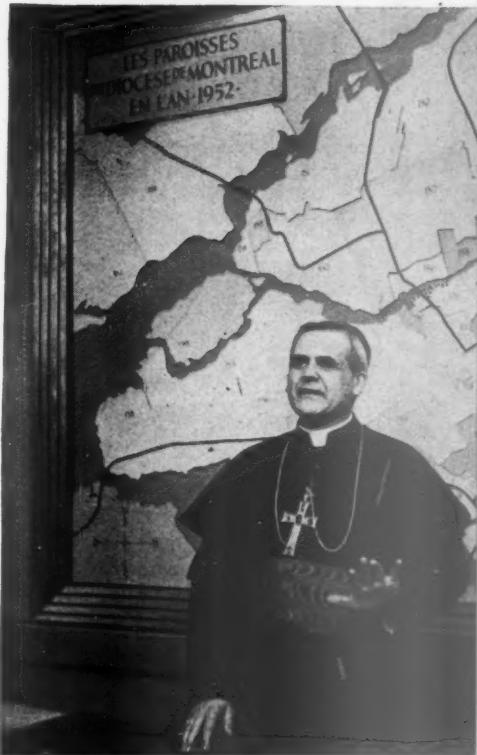


puts Montreal on Mettle

(Story continues on page 84)



FINANCE: Bank of Montreal looks out on Place d'Armes across St. James St., a finance center throughout Canadian history. Bank Pres. Gordon Ball (left) chats with colleague.



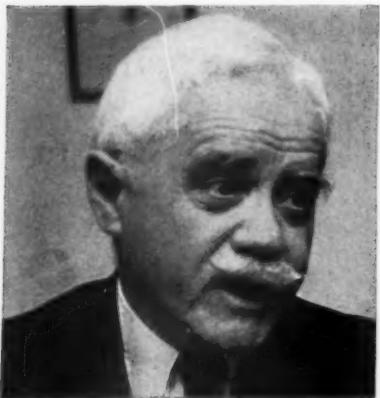
CHURCH: Cardinal Leger guards city's religious heritage, hurries to build new parishes for his expanding island flock.



STATE: Pierre DesMarais, a shrewd printer, leads city council's executive committee, wrestles with tangled Montreal politics.

Old Canada Faces New Problems

(Story starts on page 82)



J. Edouard Labelle, banker, lawyer, businessman, is director of 12 companies. "We cannot grow too fast," he says.



Raymond Dupuis owns a department store, hopes that young French Canadians will take more active interest in business.



James Muir heads the Royal Bank, Canada's largest. He sees Montreal as the great metropolitan center of the nation.

In about four weeks, the ice in the St. Lawrence River will break up, and one of the world's great seaports will reopen.

Tradition requires that the first ocean-going captain to arrive in Montreal from the sea 1,000 miles to the East receives a gold-topped cane from the city. But this year, as digging for the St. Lawrence Seaway progresses, many Montrealers wonder if future "first captains" will forego the grand prix and race right past the city toward the Great Lakes.

That the Seaway could bypass Montreal is unthinkable. Montreal is Canada's largest city, a trading, industrial, and financial center. Nonetheless the Seaway is a symbol to many people of Montreal, who have an uneasy feeling that the national center of gravity is shifting westward, that Montreal lags behind the rest of Canada.

• **Caution**—J. Edouard Labelle (top left), banker, businessman, lawyer, and vintage French Canadian, admits the lag, but says, "We must not move too fast. In Quebec we must preserve what is best." Paul-Emile Cardinal Leger, Archbishop of Montreal, agrees: "We must assimilate our growth slowly; above all we must keep our families together."

Raymond Dupuis, president of Du Puis Freres, leading French Canadian

department store, speaks for a younger generation: "Montreal must keep up. We will have to educate more of our young French Canadians in the business life."

James Muir, a Scot, heads the Royal Bank of Canada, the nation's largest, which has headquarters in Montreal. Like many leaders of the English community, he sees Montreal in its larger framework as a business center for all Canada. It can—and must—grow.

• **Divided City**—Progress comes hard, however, in a city of politics, landlords, the Roman Catholic Church, a kind of easygoing Latin way of life. Development is hard, too, in a divided city. The French, 65% of the population, tolerate the Anglo-Saxons, but hardly solicit their views on the city's operation. In return, the English tolerate the French, but have long since given up governmental aspirations, complain that the French won't get cracking on city improvements.

This week, the Chambre du Commerce is making a stab at promotion. In cooperation with the provincial government, it is mounting a Quebec Week, a show of Montreal's and the province's economic development, its potential, and its attractions. Visiting fremen from all over Canada and the U.S. will make the grand tour; perhaps, it's hoped, outsiders will consider estab-



M. Duval grows his tobacco in Montreal's fertile hinterland, markets it in the shadow of City Hall. Rural Quebec is the foundation of French Canadian culture; changeless itself, it sends surplus population to expanding cities where jobs must be found.

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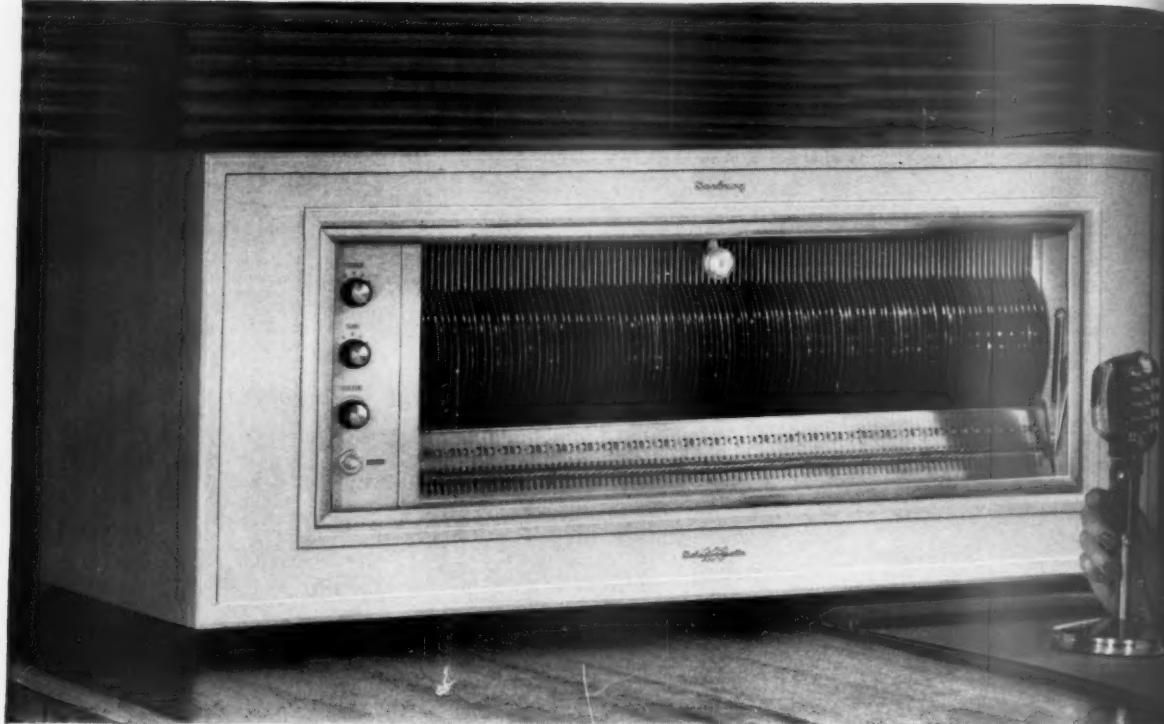
Montreal has "an air," they say. Good eating, plenty of night life, attracts visitors from more straitlaced communities of Canada.



It's a hockey town, and the cherished Canadiens pack Montreal Forum literally to its rafters. Although 4,000 new seats have been installed, waiting list for season subscription tickets runs into the thousands. Try and get a seat.



Students of McGill University, world famed for its medicine and engineering, relax with snow sculpture for winter carnival.



The Seeburg Library Unit in modern, attractive self-contained limed oak cabinet.

Seeburg has the practical answer to music for your business

It's a fact that music benefits business . . . by minimizing fatigue, by relieving tension . . . reducing absenteeism, increasing production. The question then is: "What is the best music system for our business?" The practical answer: a Seeburg Background Music System, because it is *automatic, versatile and inexpensive*.

THE SEEBUG PLAN. All of the equipment is available to you under a Lease-Purchase Agreement whereby nominal monthly payments apply toward eventual ownership of the entire system. The Seeburg Background Music Library, including a monthly refresher service, is furnished at low separate monthly rate.

THE SEEBUG BACKGROUND MUSIC. scientifically selected and programmed, is specifically designed for work and atmosphere use. Every selection of the library is recorded "live" by outstanding orchestras, then mastered and pressed to exacting high fidelity standards (30 to 15,000 cycles per second) on 45 RPM Extended Play discs of pure virgin Vinylite.

THE SEEBUG SELECT-O-MATIC. Nucleus of the system is the famous Seeburg Select-O-Matic mechanism. It's completely automatic . . . no attendants are required. Yet, when you wish, its selectivity permits playing special musical programs.

HIGH FIDELITY THROUGHOUT. With a Seeburg System, background music and high fidelity reproduction are one and the same. That's because all of the equipment is high fidelity all the way . . . from the pre-amplifier to the genuine diamond stylus pick-up, to the specially designed Seeburg extended range remote speakers.

PAGING SERVICE. A complete, efficient, easy-to-use paging and public address system is also provided when desired.

USE WITH EXISTING SOUND SYSTEMS. If you now have a sound system, you'll be happy to know how easy it is to add Seeburg Background Music Service to such existing facilities.



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cabinet.

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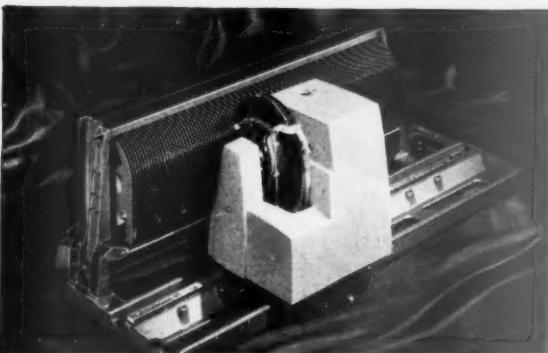
The Seeburg Console for your home. Arrange music programs at the flick of a finger . . . no albums to handle. True high fidelity. Mahogany or light Korina wood cabinets.

Whatever or wherever your business, write

For complete information on how easily and inexpensively you can bring the benefits of Seeburg Music to your business, mail the coupon.



The Seeburg Custom Unit, mounted on sliding metal tracks, for neat, compact built-in industrial and commercial installations. Attractive Korina wood panel.



The Select-O-Matic Mechanism. Most revolutionary development for playing recorded music since the invention of the phonograph. Plays records vertically.



The Seeburg Background Music Library. Includes monthly refresher service. Manufactured for Seeburg by RCA Victor Custom Record Division.

J. P. Seeburg Corporation, Chicago 22, Illinois.

Please send data on Seeburg Background Music Service.

I'm interested in a Seeburg Select-O-Matic for my home.

Name Position

Company

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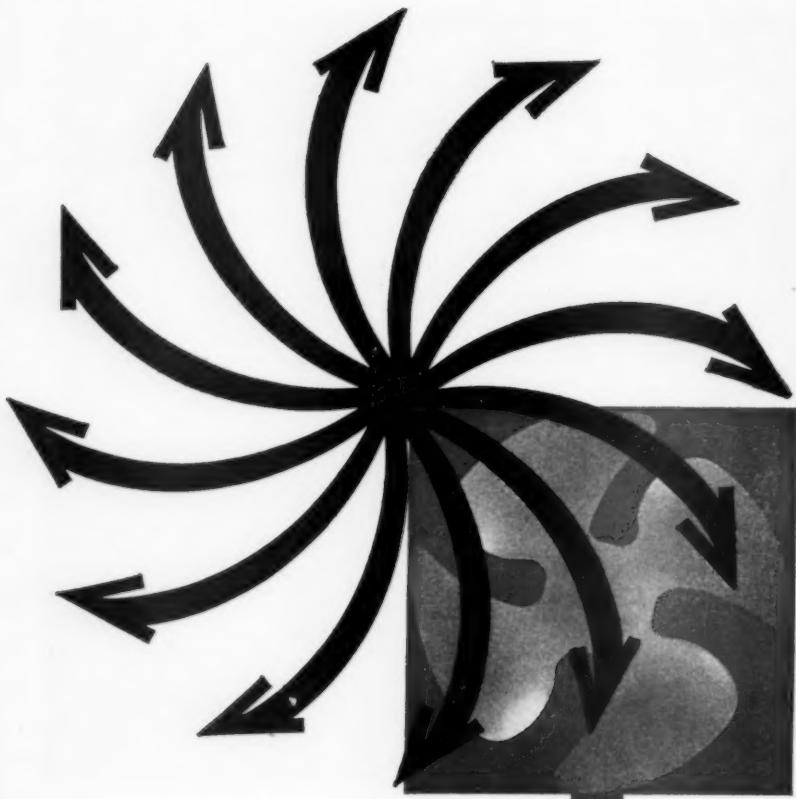
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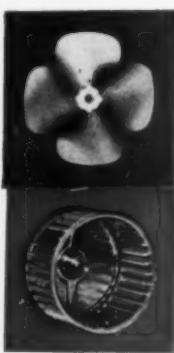
SEEBURG
Background Music Service

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Main streets are narrow, lined with lofts and apartment, noisy with traffic.

MONTREAL starts on p. 83

lishing industries in French Canada.

• **Dilemma**—Expanding industry is vital to the province and to the Montreal metropolitan area especially. Population is growing fast, and surplus rural workers are flowing into town. They must be employed there—French Canadians don't like to move from Quebec.

The needs of the times pose a dilemma to the Church, and to the people of Quebec generally. They believe their primary duty is to preserve the integrity of French Canadian nationalism and its way of life. That isn't easy in the face of the nation's rapid industrialization, its urbanization, the impact of U. S. methods through mass media, from magazines to TV.

Nowhere else does the dilemma of the two Canadas show up more clearly than in Montreal.

I. Kingdom of Faith

Jacques Cartier, who discovered the St. Lawrence and the island topped by Mount Royal in 1535, dreamed of a Kingdom of Faith. But it wasn't until 1642 that a mission city was permanently settled as Ville Marie de Montreal. The Church came to convert the Iroquois; soldiers came to fight the Indians off if conversion failed.

In Paris, Cardinal Richelieu took a hand in New France's colonization. A feudal seigniorial system of land tenure was established, and ever since the Church has held huge swatches of the island's 28,640 acres, tax-exempt. Now Cardinal Leger finds that the Gray Nuns must sell their farms on the outskirts to make way for industry and homesites.

Montreal was an outpost for soul-saving, exploration, and the fur trade. It grew apart and differently than many colonies, perhaps because for months each year ships—and instructions—from France were blocked by ice.

• **Slow Growth**—New France grew much more slowly than the British

THE New Look IN FOUNDRY OFFICES



skilled
design
and
PC
Glass Blocks
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the
difference

George M. Ewing Company
Architects & Engineers, Philadelphia, Pa.



THE Lebanon Steel Foundry is still operated by the two men who founded it 43 years ago. Yet they are quick to adopt the newest and best production methods, anxious to keep the company young in spirit, modern in appearance.

The new office building shown here proves this.

A 2-story panel of PC Glass Blocks acts as a backdrop for the striking lobby entrance. 12-inch decorative blocks are surrounded with 6-inch blocks. The result is an interesting pattern and texture, a softly glowing wall of light to accent this handsome building.

PC Glass Blocks are literally a "raw material" in the hands of the architect. When used with skill, they combine good taste with breathtaking appearance. Structurally, PC Glass Blocks are a proven product—and imagination is the only limit to their usefulness.

See our catalog in Sweet's or write for more information to Pittsburgh Corning Corporation, Dept. No. G-35, One Gateway Center, Pittsburgh 22, Pa.

PC Glass Blocks

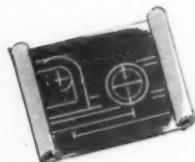


ALSO SKYTROL® AND FOAMGLAS®

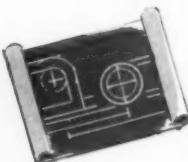
In Canada: 57 Bloor St. W., Toronto, Ontario

IN PRODUCT DEVELOPMENT

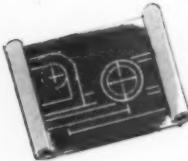
Where do you START...and STOP?



Some product development organizations start . . . and stop . . . with a "design" or a blueprint.



Some go beyond the blueprint to production planning . . . and stop there.



At Designers for Industry, we find successful product development *starts* with the user's or buyer's needs . . . and *stops* only when a product is developed, built and tested, and ready for profitable manufacture and sale.

On the basic belief expressed above, DFI has built a unique Creative Product Development organization which works like this:

How about market demand?

Is there a real need and potential for the new or redesigned product under consideration? DFI's Technical Survey Division obtains unbiased facts.

How about competition?

What new developments are "in the wind", or are just being marketed, which may make your "new" product prematurely obsolete? A DFI Technical Survey, plus DFI Research and Development studies, gives dependable factual answers.

How about performance?

Will your product come off the drawing boards equipped to perform its function reliably and economically? DFI Design Engineering has the necessary equipment and facilities for full functional testing of a product or process we engineer.

How about producibility?

DFI Experimental Manufacturing provides the practical proving ground for our creative skills. Here, the best methods and materials to be used in the actual manufacture of a product are proven . . . by means of prototypes, production processing, process specifications and work-simplification studies.

CREATIVE PRODUCT DEVELOPMENT IS OUR BUSINESS

Whether your project is extremely complex or relatively simple . . . a component, product or complete system . . . a special machine or automatic production process . . . DFI will assume full responsibility for a co-ordinated development program sparked by fresh new thinking and creative ability. We'll gladly review your problem, without obligation. Write for a copy of our booklet, *DFI Facilities for Engineering Research and Development*.

PLANNED



PRODUCTS

Designers for Industry

Incorporated 1935

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TECHNICAL SURVEYS • RESEARCH AND DEVELOPMENT
DESIGN ENGINEERING • PRODUCTION ENGINEERING



The sailor's church near the waterfront, a landmark since 1657.

MONTREAL starts on p. 82

colonies to the south. At the beginning of the Seven Years War (our French and Indian War), which led to the cession of New France, there were 1.5-million British colonists in North America, barely 70,000 French.

The end came in September, 1760, when Gen. Jeffrey Amherst occupied Montreal. The French simply moved over and made room; a friendly entente developed between French and English; the Church's power and land was left intact. With the coming of the English—including many Scots—Montreal's history as a commercial center began.

The revolution that created the United States also created the two Canadas. Tories, the United Empire Loyalists, who fled north from the American Revolution by tens of thousands, brought a new outlook to Canada. But not many came to Quebec; their culture wasn't able to dilute that of French Canada. To this day, French Canadians are a remarkably unmixed stock; where there have been intermarriages, the Anglo-Saxons often disappeared. Once proud Sullivans have long since become Sylvains, and now have difficulty learning English.

• Empire Building—But while the French guarded culture and the home, the English who did come to Montreal raised a business empire. They made Montreal the gateway to the Province, and later—in 1867—to the Dominion of Canada. It became the continent's second largest port, and held that title into the 20th Century. Canada's railroads were conceived in, and equipped from, Montreal, still headquarters for the great Canadian Pacific system and Canadian National Rys. These roads brought heavy industry, structural steel, rolling stock, and the huge Angus Shops of the CPR. Montreal became Canada's textile center, tobacco manufacturing began, so did cement and electrical industries.

Factories clustered the narrow alleys

BUSINESS WEEK • Mar. 12, 1955

How big a "heat bill" are you paying for truck tires?

• **Here's how many truck operators are losing thousands of dollars every year—without even realizing it:**

Every time you junk a tire with good tread rubber left on it . . .

Every time an impact blowout kills what was a "good" tire, delays a delivery, runs up down-time . . .

Every time your recap man points out a weak spot in a tire and says, "Can't recap that one" . . .

... You're paying a part of the price for hot-running truck tires—a "heat bill" that runs into millions every single year. For few truckmen realize that heat can cause this costly damage in just ordinary weather. Truck load, speed and length of run combine to do the rest.

These factors can easily build up enough heat to weaken a tire body permanently—enough heat to increase tire air pressures 25 pounds.

Danger! Heat at work!

Then every blow from rocks and road hazards becomes a *damaging* blow and every weakness already in your tires

becomes a *dangerous* weakness. Chances of a blowout or injury that can ruin a tire for recapping are multiplied. Then the economy of buying a cooler-running nylon cord tire proves itself beyond question.

Have you ever noticed how a wire heats up, possibly even breaks, when you flex it back and forth? It's the same with tire body cords. And the greater the mass of the cords, the greater the heat.

That's why the extra strength of nylon is such an important advantage. Using nylon, you can build a tremendously strong tire body with less cord—thinner, lighter cord that generates less internal heat. And the heat that is generated in nylon does less damage, for nylon is far more heat-resistant than other body cord materials.

What you need besides nylon

First, be sure you get a tire that makes the most of the amazing properties of nylon. Kelly-Springfield achieves this

with a series of costly and exacting processes—chemical dips, wet stretching and heat stabilizing—that bring this wonder cord to the precise point of greatest strength and efficiency.

Be certain, too, that the tire is built for greater strength and cool-running properties *throughout*. Kellys also meet this requirement 100%. The tread compound, tread design, even the design of the sidewalls contributes importantly to cooler running and longer wear.

Hundreds of truck operators' own cost records prove that these tougher, cooler-running Kellys do result in big dollar savings. Your nearest Kelly Dealer will be glad to show you how these records apply to your kind of trucking and also to give you all the pertinent facts about the right Kelly Truck Tire for you. For an interesting manual on how to get the most from truck tires, write: The Kelly-Springfield Tire Company, Cumberland, Maryland.

There's a tough KELLY designed for every trucking job!

THE KELLY-SPRINGFIELD TIRE COMPANY, CUMBERLAND, MARYLAND



WHERE TO START A GOOD NEIGHBOR POLICY



The area above, enclosed by the dotted lines, is an important area of good "neighbor relations". Today, more than ever before, plant management is turning its attention to industrial air cleaning—and replacing noxious or nuisance chimney discharges with harmless plumes. Here, indeed, is the good-neighbor policy in action.

"Buffalo", pioneer in this field, has developed a broad line of equipment to meet the most rigid requirements of industry. "Buffalo" units are handling almost every conceivable contaminant, from low concentration toxic gases to stringy or abrasive discharges. They are handling them with high collection efficiency and minimum maintenance.

"BUFFALO" EQUIPMENT IS AVAILABLE TO SOLVE MANY DIFFICULT AIR CLEANING PROBLEMS

- Gas Absorbers
- Wet Glass Cell Air Washers
- Rotary Multi-Stage Gas Scrubbers
- Hydraulic Scrubbing Towers
- Hydro-Volute Scrubbers
- "DC" Static Washers

WRITE TODAY for the most satisfactory answer to your particular air problem. "Buffalo" know-how and equipment are at your service.

BUFFALO FORGE COMPANY
458 BROADWAY

BUFFALO, N.Y.

Publishers of "Fan Engineering" Handbook
Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
Sales Representatives in all Principal Cities

VENTILATING AIR CLEANING AIR TEMPERING INDUCED DRAFT EXHAUSTING
FORCED DRAFT COOLING HEATING PRESSURE BLOWING

along the waterfront; finance became the preoccupation of St. James Street. The city was, as Stephen Leacock puts it in his history of Montreal, "at once Liverpool and Lombard Street, Pittsburgh and Wall Street."

II. Three Cities

An outsider can better understand Montreal by looking at its relations with the city of Quebec to the East, and Toronto to the West.

Montreal looks over its shoulder to Quebec as the fortress of French Canadian nationalism. But it has fought with Quebec since the days of Frontenac, when the two were rival centers of population and influence. Montreal has won in many respects, but Quebec is the seat of provincial government. As such, Montrealers say, it makes their life miserable.

Pleas for financial help, the return to the city of its tax revenues, usually go unheeded. Premier Maurice Duplessis, who holds the province in a near-totalitarian sway, is more attuned to his rural supporters than to Montreal. His battles with the federal government in Ottawa, businessmen believe, victimize the city and impede its progress.

Rival—Montreal's westward vista is equally unsettling. The Toronto metropolitan area, backed by its provincial government, sings of its industrial growth, the parade of new U.S. and European branches setting up, its financial supremacy (in terms of checks cashed, stock market trading), its plans for a Canadian Ruhr growing along the lakeshore (BW—Feb. 7 '53, p 58). Toronto boasts one-third of the Canadian market within a 100-mile circle. In employment, aggregate payrolls, value of building permits, median income for heads of families, Toronto claims the lead, and in some instances the gap is widening. Retail sales of Toronto's metropolitan district shades Montreal's despite the fact that Montreal's 1.6 million metropolitan population is 500,000 more than Toronto.

One economist suggests this reason for Toronto's rapid growth relative to Montreal: The postwar dislocation of world trade, and of the sterling area's trade in particular, has been hard on Montreal. It is organically tied to trade, to bulk exports of grain and timber; its industry is not highly diversified. Montreal tends to look eastward, across the scaleans.

Toronto is more oriented toward the U.S., and to the Canadian North. It stands at the market and industrial heartland of the continent. Its industry is highly diversified.

Businessmen—especially in the English community—realize this and sometimes talk pessimistically of Montreal's future. Occasionally a plant or home

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How a special Armco Steel gives your products lasting paint beauty

This simple scratch test shows how a special Armco Steel gives your products an important sales advantage in today's competitive market.

The left half of the painted steel sheet above is untreated zinc-coated steel. The right half is the same steel, but it has been given a special surface treatment so it will take and hold paint. This is Armco ZINCGRIP PAINTGRIP Steel.

In the test, a sharp screwdriver was drawn across the painted panel. You can see how the paint flaked along the scratches on the untreated zinc coating (left). But paint on the specially treated zinc coating (right) shows only faint scratches—with no signs of flaking.

Armco ZINCGRIP PAINTGRIP Steel resists rusting and prolongs paint life. Your products can have these benefits.

Remember, too, that 40 years of national advertising make the Armco triangle trademark a valuable sales aid.

ARMCO STEEL CORPORATION, 175 Curtis St., Middletown, Ohio
Send me information on Armco ZINCGRIP PAINTGRIP.

We manufacture _____

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____



ARMCO STEEL CORPORATION MIDDLETOWN, OHIO
SPECIAL STEELS

SHEFFIELD STEEL DIVISION • ARMCO DRAINAGE & METAL PRODUCTS, INC. • THE ARMCO INTERNATIONAL CORPORATION

The man from Cunningham & Walsh



The man behind the counter is Howard Wilcox, an art director in our advertising agency. As you can see, he's working at a newsstand.

It's as much a part of his job as making layouts or the buying of finished art for our clients.

It is a fixed policy for all our creative people . . . copy writers, art directors, account executives . . . to work at the point of sale at least one full week a year.

Hard work, yes. But it helps our advertising work harder, too.

Cunningham & Walsh, Inc., 260 Madison Ave. N.Y., 16 MU3-4900

New fastening tool uses
a powder cartridge for power!

REMINGTON STUD DRIVER

A 32 caliber cartridge powers the Stud Driver and imbeds a stud into steel or concrete with a squeeze of the trigger! Speed like this means savings in anchoring forms, conduit, machinery, ducts around your plant. One man can set up to 5 studs per minute! No costly predrilling needed. Tool is portable, weighs 6 lbs.

Tell your maintenance man about the Stud Driver—the tool that cuts fastening costs 80%. Write for folder. Industrial Sales Division, Remington Arms Company, Inc., Bridgeport 2, Conn.

"If It's Remington—It's Right!"

Remington 



Listed & Approved by the Underwriters' Laboratories, Inc.

Compact, light for overhead work

office moves to Toronto, for a variety of reasons (land, for one thing, is apt to be cheaper). But the French Canadian shrugs, and notes that more industries come to Quebec than leave, and that there will be plenty of money and financing for all.

III. City With an Air

For every English-speaking Canadian who would leave Montreal, there are many who would hate to live elsewhere. "Toronto is just a collection of villages, growing too fast," said one. "This Montreal is a city, it has an air." Strait-laced Torontonians enjoy coming to Montreal to eat. Western Canadians like to come and do the town.

Some of them profess they are sick of hearing about the businesslike virtues of Toronto.

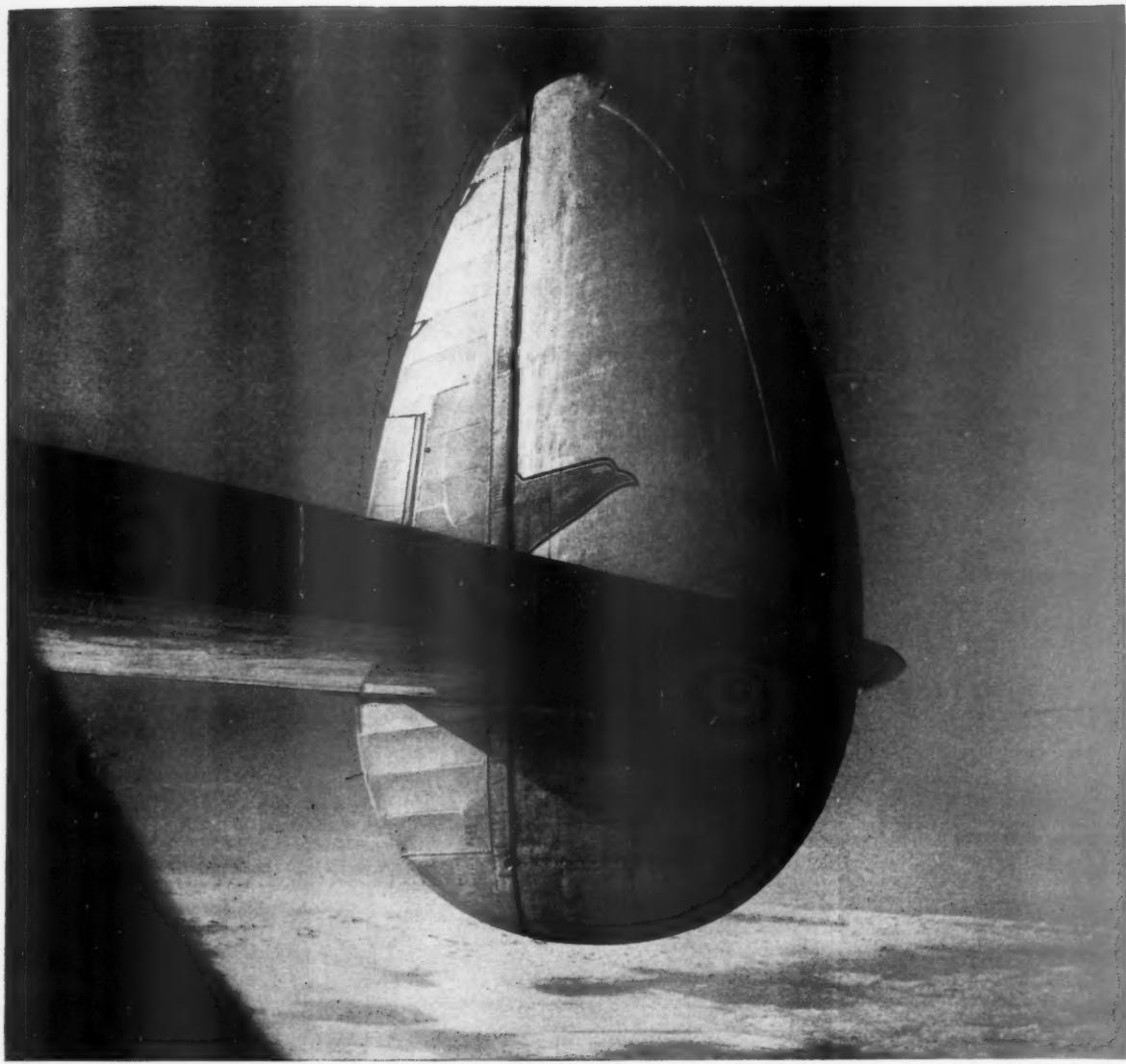
Perhaps, they say, Montreal hasn't advertised its virtues.

Canada's two largest banks (Royal Bank, Bank of Montreal) are there, so is Sun Life, one of the world's titans of insurance. Aluminium Limited runs its vast business from the Sun Life building. Montreal East's refineries are expanding, and a large petrochemical industry is growing up in their shadow. Aircraft and engine manufacture is important in Montreal.

It is a crowded textile center; and you have heavy industry like Canadian Car & Foundry, Dominion Bridge, Dominion Engineering, Canadian Vickers. A cadre of U.S. branch plants has settled in Montreal, serving the Eastern Canadian market for which the city is the hub.

On the island itself, Montrealers point out, is one-tenth the entire national market. Growing population and the industrial vigor of Quebec assure its market future. The province has tremendous hydropower resources; it has iron, forest products, other minerals, now the fabulous light metals. If you are concerned with the Canadian market as a whole and with export, too, says George Mooney, of the Economic & Tourist Development Board, Montreal is the best bet. East, West, North, and South, goods will move through the city.

As for the Seaway, Montreal's boosters have an answer. Certainly some inbound cargo will skip Montreal. But with 68% of the harbor's present inbound traffic destined for the Montreal area, and 42% of its outbound shipments originating nearby, the port can't be bypassed out of existence. There will probably be more, not less, transshipment in the end; and the La Prairie Basin across the river from the port could become another important Quebec industrial center as well as Canada's largest deep sea harbor. Finally, anything that increases Canada's and Que-



Flying high to keep inventories down

*Emery is the answer
to an old problem:
obsolete inventories*

A customer of ours makes airplanes. Often, during production, improved equipment is developed. Then, he has to replace old designs with the new, leaving him with a stock-pile of obsolete parts. He turned to Emery to cut down this costly inventory. Emery delivers so fast and dependably, he can now keep component parts to a minimum, replacing them with improved designs, whenever available, without interrupting production.

Only Emery's exclusive Air Procurement Service can do this kind of job... for you too. Write or call today... ask for "Air Procurement Service."

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General Offices: 801 Second Avenue, New York 17

Offices and agents in all major cities and towns in the United States, also serving Alaska and Canada.



Even English community's residential district sports bilingual signs.

MONTREAL starts on p. 82

bec's trade can do nothing but good for Montreal.

IV. Split Make-Up

Any view of the future has to weigh Montreal's most pressing problems. They are legion, and the solutions are difficult.

- Lack of enough modern harbor facilities, and congestion within the city itself, are acute problems. The south corner of the island is dominated by Mount Royal, which squeezes the city against the river and diverts traffic around it. East-West arteries are badly needed; those that exist are narrow. Cross-mountain roads are inadequate, and clogged, as are all roads, by Montreal's heavy snow.

- Attractive sites for heavy industry, especially on the waterfront, are nearly exhausted. Sites in the North, over the mountain, are more plentiful, but are more suited to light industry and are expensive. If development spills over across the river, expanded crossings—bridges, even a tunnel—must be built.

- There are 35 municipalities on the island besides Montreal proper; yet many problems—roads, water, zoning—are islandwide. But it has been virtually impossible to get islandwide agreement on anything.

- Two of Everything**—Millstones like these aren't peculiar to Montreal. But the nature of the city complicates them beyond the imagination of a U.S. planner.

There are two of nearly everything, French-speaking and English-speaking (the French are more bilingual than the English, by a long shot). The two racial groups (plus a large prosperous Jewish community, which leans to the English) don't mix much, business or pleasure. There's a Chambre du Commerce and a Board of Trade, Protestant and Catholic school systems, even

a Ligue de la Jeunesse Feminine alongside the Junior League.

Everyone, a Montreal chronicler has said, feels himself in a minority. The Jews because it is their history; the English because they are an island in an alien culture; the French because they've been working for the English since 1760.

But the French have the votes, and a heritage to defend.

- Frustration**—French Canadians are conservative, they do not like to borrow money. They do like to invest in real estate. Raising taxes, if it's possible, is more unpopular in Montreal than anywhere in the world. The city is run for and by the property-owners and for the tenants, who make up 85% of the total. Industry as such doesn't get much of a look-in. The city planner, it is said, is a frustrated man.

A council of 99 runs Montreal. Of these, 33 are elected by the property owners; 33 by the property owners and the tenants; 33 by institutions like the Chambre du Commerce and McGill University. At the head of the council is a new regime, elected last fall. Thirty-nine-year-old Mayor Jean Drapeau's reform movement was swept into office with revelations of police involvement in gambling and prostitution. Drapeau represents to the public an executive committee of seven: Pierre DesMarais, a wealthy printer, is chairman and the power; C. Hugh Hanson, once a brewer, is vice-chairman and represents the English community.

Montreal has always been a fairly open city. It has had many new brooms down through the years; none has really "cleaned up," and reorganized the city with the bright, efficient "businessman's government" so prized in many U.S. cities.

The city's problems are large, complex enough to tax the most able team. Drapeau and company, though bent on tackling them, are pretty well overwhelmed. Already disillusion has set in.

- Progress**—Yet almost in spite of itself, Montreal grows and expands in new industry, in facilities, in homes, in ideas. His Eminence Cardinal Leger says he has had to create 50 new parishes over the past few years, at an average cost of \$250,000 a parish. More are in the works. Steinbergs Ltd., Montreal's largest food chain, is convincing more and more housewives to pay cash at the supermarket instead of buying on weekly credit from the small neighborhood shop. At the University of Montreal, the famed Catholic school that has always—in the French Canadian tradition,—stressed classics and the law, is expanding its engineering school and will one day soon have a new campus building for business training.



HOW LUKENS HELPS REDUCE THE PRESSURE

Pitching in to help qualified builders solve your equipment problems is a prominent part of our job at Lukens. As the world's leading producer of specialty steel plate and plate products, we know the importance of close cooperation where materials selection or special considerations like design and fabrication are concerned.

Carbon and alloy steels are one example. Whatever the service requirement, Lukens offers builders the widest range of qualities and sizes of plates available. Starting with everyday carbon steels the selection ranges up to such advanced special-service alloys as A-301 and the versatile new Lukens T-1. And, the materials are backed up by full assistance in matching them to the job.

If heavier plates are called for, Lukens rolls the widest and heaviest anywhere. Because we are specialists, builders also come to us for money-saving steel plate shape equipment components, economical clad steels and the widest range of types and sizes of heads available. As suppliers, we help back up builders' efforts to increase efficiency of production equipment.

If you would like to know more about cost cutting through equipment modernization, outline your problem to the Manager, Marketing Service, 747 Lukens Building.

**LUKENS
STEEL COMPANY**
COATESVILLE, PENNSYLVANIA



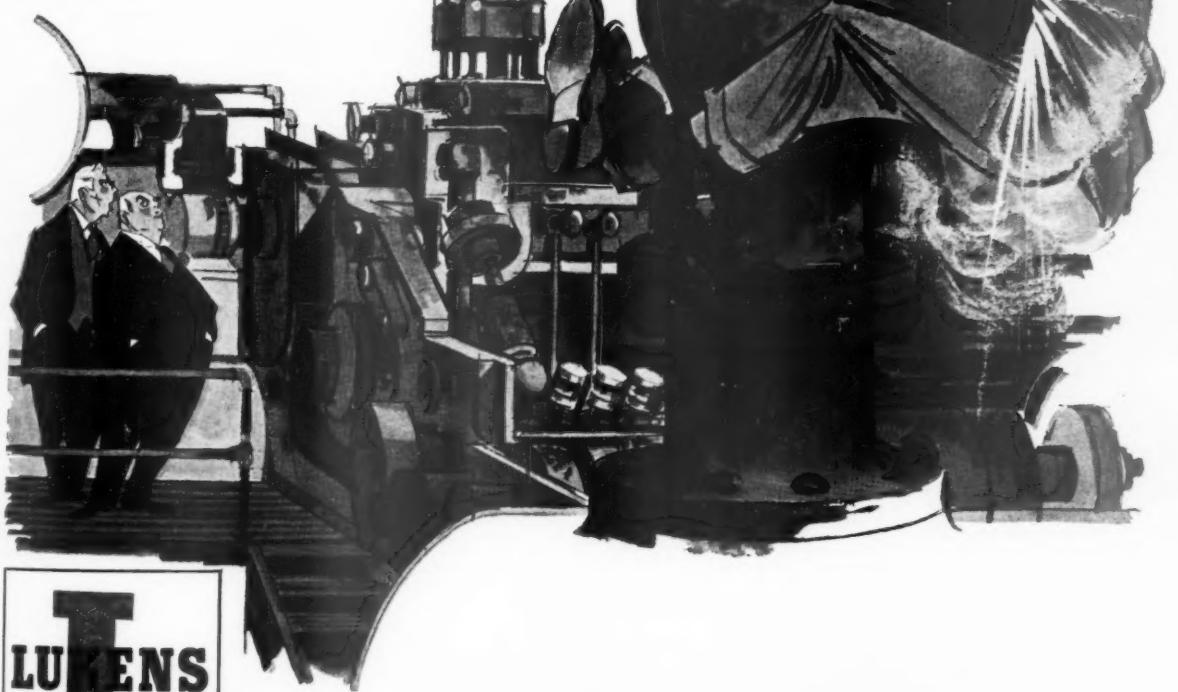
OLD EQUIPMENT MAY COST A COMPANY NOTHING—NOTHING BUT ITS FUTURE

How much pressure can the president take?

When a product can't match the competitive pace for price and quality, the balance sheet soon shows the effects. Pressure for fast, corrective action is on the president—and his whole management team.

In today's fast-moving technology, profit trouble is often traced to obsolete equipment. It may be written off, suggesting production economy. But it can easily be stretched too far. Outmoded production units soon cost a company its market position when price and quality advantages are lost.

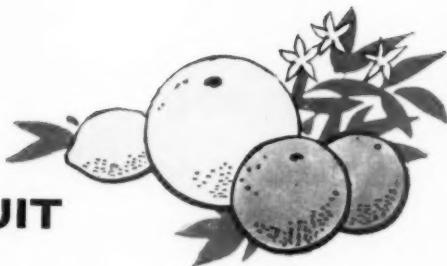
If you are feeling this competitive pressure today, qualified equipment builders are good men to add to your planning team immediately. Working with your engineers and consultants, they can add their specialized knowledge and resources to help solve your equipment problem. New production efficiency for you is their business. Ask them to come in and talk it over.



Lukens Steel Company, Coatesville, Pennsylvania

WORLD'S LEADING PRODUCER OF SPECIALTY STEEL PLATE • CARBON, ALLOY & CLAD STEELS • HEADS • PLATE SHAPES • FOR QUALIFIED EQUIPMENT BUILDERS

CITRUS FRUIT



... and Tailor-Made Packaging

A grade-school teacher asked her pupils for a composition on their favorite fruits. One little girl wrote: "I like oranges because they taste good and my mother says they are full of vitamins. I like them best when they come already squoze in a can."

Yes, most people do like their oranges "already squoze." But no matter how you prefer your oranges—or grapefruit, lemons and limes—Continental is on the job with tailor-made package service.

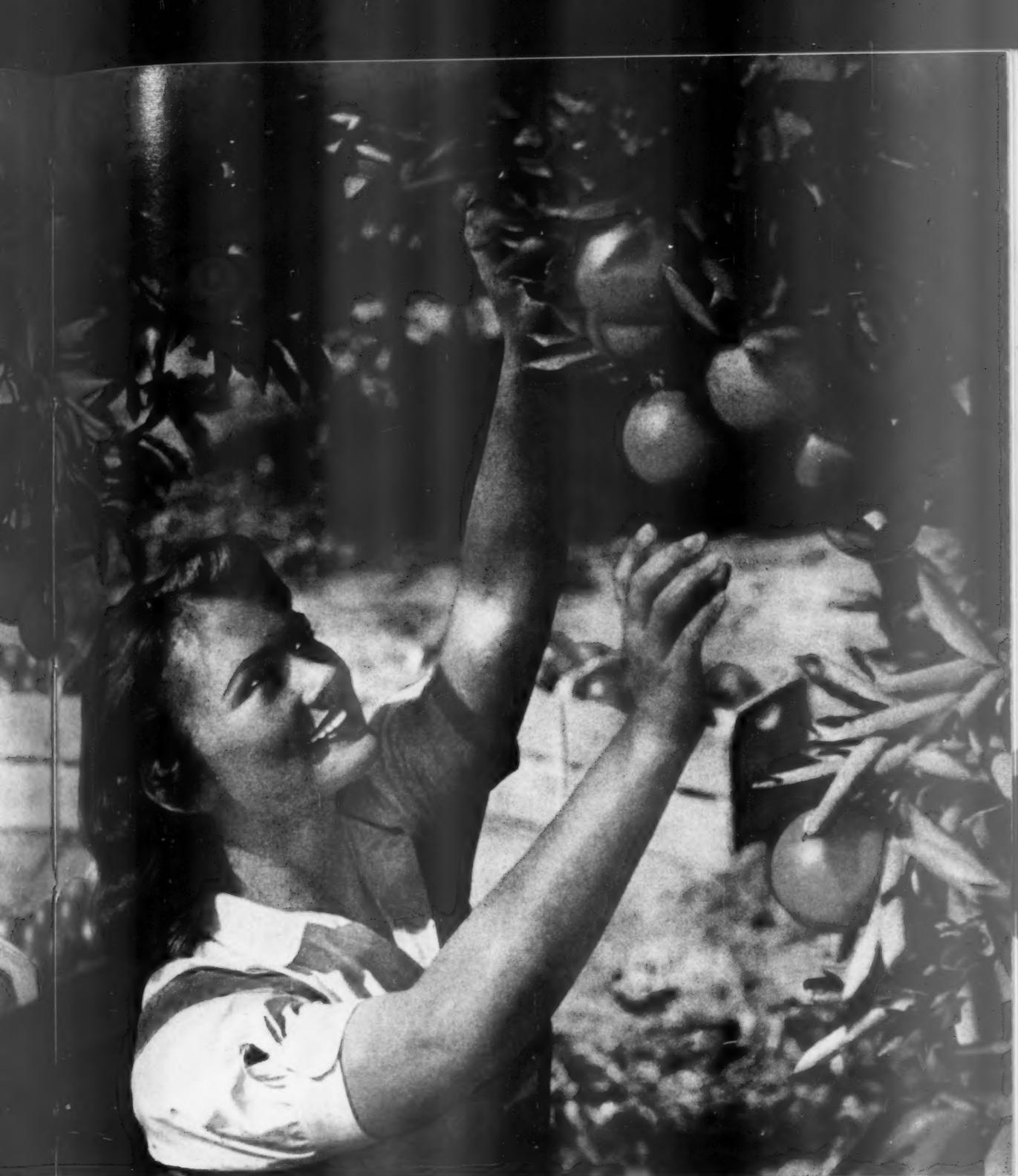
Until 1932, practically all oranges went to market in crates. Then canned whole juices were developed, followed in 1947 by canned frozen concentrates. Today about half of all oranges reach the public in cans—and the percentage is rising rapidly.

The creation of new canning processes has expanded the market for citrus growers and given the retailer another profitable and easily handled line. Most important, tailor-made packaging has made it possible for you to enjoy healthful, delicious citrus juices every day, whether the fruits are in season or not.

Tailor-made packaging for almost everything

With a host of materials to work with, and fifty years of experience at our command, Continental is prepared to produce tailor-made package service for nearly any product you can name. **CONTINENTAL CAN COMPANY**, New York 17, N. Y. • **CONTINENTAL CAN COMPANY OF CANADA, LTD.**, Montreal





CONTINENTAL CAN COMPANY

Fifty Years of Tailor-Made Packaging

SERVING INDUSTRY... SERVING AMERICA

Tin Cans
Fibre Drums
Paper Containers
Flexible Packaging
Plastic Pipe
Steel Containers
Caps and Cork
Plastic Bottles
Decoware®
Conolite®

Scotland's Prince of Whiskies

12 year old Chivas Regal, rare in flavor and superbly mellow, is produced from the choicest distillations of Scotland. It is blended by Chivas Brothers Ltd. of Aberdeen, a House founded in 1801.



Melodies of long ago seem to linger in the Music Gallery of a stately old castle.

CHIVAS REGAL
12 YEAR OLD SCOTCH WHISKY

CHIVAS BROTHERS LTD. of Aberdeen, Scotland. Established 1801.
By Appointment Purveyors of Provisions and Scotch Whisky to the late King George VI.

BLENDED SCOTCH WHISKY • 86 PROOF • CHIVAS BROTHERS IMPORT CORPORATION • NEW YORK, N. Y.

MANAGEMENT

Directors: Doing More Directing

● A big change in company boards is quietly taking place. Now, directors are heard as well as seen.

● Today's management men profess to like the advice and prestige of the modern type of board. It bulwarks them against ill-founded attacks by dissident stockholders.

● Today's directors say they'd rather work more than be rubber stamps. They don't serve for the stipend but for their interest in the company.

A few weeks ago, the president of one of the biggest companies in its field was fired by the board of directors.

As in many companies, the board included the president himself and a few other top executives, plus some directors from the outside. One of the outside directors put the skids under the president. He had watched the company lose market position, its stock witt on Wall Street, its finances fester. He talked it over with other outside directors.

The ouster was handled politely. The director asked the president to lunch, told him of his dissatisfaction with management, and said he and at least two other directors were going to resign—with a statement of why—unless the president got out within three months to make way for more competent executives to move up. The president capitulated.

• **True Story**—This incident really happened. Its significance is this: Boards of directors are playing a more important role these days—with or without the approval of the operating executives.

Investment bankers and management consultants trace the beginnings of this trend back to before World War II, but it was interrupted during the war and the postwar prosperity. Now, say the experts, the trend is being picked up again.

• **What's Happening**—This week, BUSINESS WEEK reporters talked to directors and executives about what is happening to the role of boards. They found agreement that:

- The character of boards is changing. More than ever before, they are becoming groups of specialists—and not just in the financial and legal fields.

- More outsiders are serving on boards of companies that have generally been controlled by management.

• More is being expected of directors—such functions, for example, as active public relations work.

• Boards are getting bigger, meeting oftener and longer.

• Directors are being paid higher fees, and there is a movement toward paying them salaries instead of per diem allowances. For example, General Mills, Inc., pays its outside directors \$10,000 a year (BW-Mar.28'53, p136).

• **Not Universal**—Of course, not every corporation displays all of these earmarks—many companies don't fit these generalities at all. And the trends haven't gone so far as some management consultants would like. But these points are evidence that companies are paying more attention to (1) who sits on their boards and (2) what a board can be expected to do.

One management consultant—McKinsey & Co.—plans a sharp expansion of its service to clients on these problems. McKinsey thinks there is a burgeoning market for such advice.

I. What Kind of Board?

There are good reasons why businessmen are turning their attention to their company boards right now. Three of these reasons are closely related to today's business news:

Dissident stockholders are getting rambunctious, and presidents of many companies are trying to fortify their position by strengthening their boards with men who can help stave off attacks. They want directors who have special qualities: prestige, expert knowledge, or the backing of big shareholdings.

In these days of professional management, you might expect that the last thing a president would want is a group of strong-minded directors. But every-

where BUSINESS WEEK reporters went among management people they heard the same comment: "It isn't a strong board that worries us—it's an ineffective one."

A new type of stockholder is becoming a great factor. That's the institutional buyer of shares—the pension trusts, investment trusts, and insurance companies. These buyers are more susceptible to the prestige and the savvy of the company's directors.

Institutional investors can be a major source of capital, business policymakers know, but before they buy, say, 15,000 shares of XYZ Co. for their portfolios, they take a long look at the company's management. They are more likely to smile at the company that's staffed up top with experts.

Oil companies have traditionally named their boards almost completely with insiders—company executives. Now, Standard Oil Co. (Ohio) is campaigning to broaden its list of stockholders and to attract institutional funds for the time when it needs more capital (BW-Feb.20'54,p68). This is a paramount reason for the increase of the company's board next month from 7 to 10 members, with two of the three newcomers drawn from outside: Thomas F. Patton, first vice-president of Republic Steel Corp., and Lawrence Appley, president of American Management Assn. Already on the board is James J. Nance, head of Studebaker-Packard.

Experts are needed particularly in this time when companies are diversifying far outside their traditional fields and when competition is so keen that the race must go to the smartest.

Management's job is to manage, a Detroit executive comments, and it's a profession in itself to get the best possible advice and assistance in carrying out this function.

A Midwest banker adds that the modern board is becoming a composite of the authority and experience of insiders and the prestige and broader outlook of the outside group.

A Houston oil vice-president agrees: "The smartest men in top management today realize that no one person, either by nerve or intuition, can compete with another company whose management is closely advised by a team of experts."

II. How You Get Them

The urge to have a board of specialists creates a problem in itself. Again and again, BUSINESS WEEK reporters heard



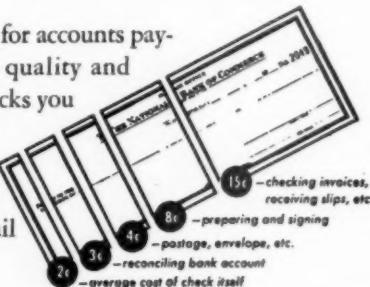
LOOK TWICE at your check-preparation costs

In a recent survey, The Todd Company found that it costs the average business 32¢ to write a check. The diagram below shows how these costs are distributed.

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about the difficulties of adding new people to a board.

For one thing, to a man in the high tax brackets, your director's fee looks like the old \$20 gold piece. To him, it means only another chore in return for a trivial amount of take-home pay. For another thing, it's hard to get older directors to quit.

• **Aging**—The head of a Cincinnati company confirms that average age of directors in his area is higher than most experts would approve. "Once a man gets on a board," he says, "he generally doesn't want to get off. And people seem to live a little longer in Cincinnati."

In Detroit, one businessman is serving on several boards primarily because he has a reputation for being able to ease older men out of directorships to make room for younger ones. Around the country you find a growing insistence that directors have definite retirement ages.

Says an Atlanta president: "One of our directors just died at the age of 87. He had attended all the meetings 'to be with the boys'—but he had been ineffective for 20 years."

This problem of age, though, may be solving itself. A Chicago executive sees a marked trend toward bringing in directors in their late 30s or early 40s.

• **The Lure**—Even so, many companies find it hard to pick up the kind of directors they want. In big companies, the prestige of serving on the board can often attract top talent, regardless of the absence of financial incentive. The small companies can't offer this prestige.

An important appliance maker has been looking a long time for a top-flight merchandiser for its board. In Detroit, an executive who retired at an early age reports he has been flooded by requests from small companies to serve on their boards.

III. What They Can Do

Since pay alone won't attract high-grade directors, and not every company can offer prestige, what can you do to get better boards? A management consultant suggests making the job more attractive, giving directors an active part in the company.

"The kind of man a company seeks usually wants to accomplish things, not just sit on the sidelines," he says.

Besides, he points out, such men are most concerned about their reputations. They want to participate fully in a company's affairs to make sure management doesn't make mistakes.

• **More Duties**—Many companies checked by BUSINESS WEEK reporters say it is their policy to give their directors definite duties and plenty of information. "It comes down to this," says a

BETTY FURNESS SAYS:

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Southern businessman who serves on company boards. "Management used to resent directors' interference—now we directors resent anything that smacks of the rubber stamp."

An example of duties given to directors comes from Terrell C. Drinkwater, president of Western Air Lines, Inc. WAL installed a working board in 1947 and now has 13 directors who hold quarterly meetings in cities on the airline's routes, meet influential townspeople, and between times act as public relations men for the company.

In other companies, too, directors are encouraged to delve deeper into everyday affairs. It makes their work harder, takes more time, but it makes the business of being a director more interesting, too. A Detroit company now has all-day board meetings, with reports by executives in various departments and questions and answers on such subjects as whether or not to build a new plant, enter a new field, buy another company, or adopt a new labor relations policy.

In a big West Coast company, an especially active director—who isn't always appreciated by management—whips out a little black book to point out how he has tabbed 20 lower-echelon men as fast-comers in management. And one company president makes it a point to take his board hunting and fishing with his executives, so directors can size them up.

MANAGEMENT BRIEFS

Hupp Corp., Detroit instrument maker (BW-Feb. 26 '55, p144), plans to buy the electronics end of Brown-Allen Chemicals, Inc.'s, business. In the deal with the Carlisle (Pa.) company, Hupp gets the rights to make or sell in the U.S. some communications equipment developed by Siemens & Halske, German electrical equipment maker.

Ohio State University's placement office reports that demand for industrial management and marketing graduates has increased 23% over last year.

Procter & Gamble Co.'s newest aid-to-education plans make a special, and perhaps unique, provision for women. Beginning this fall, 10 of P&G's 60 full, four-year scholarships a year will be for women only. An unrestricted \$500 grant to the college goes with each of the 60 new scholarships.

Ford Foundation by 1957 will give \$50-million to private universities to boost faculty pay. Schools receiving the new grant will be asked to supplement it in a percentage depending on the school's other resources.

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Striking beauty is provided this smart reception area by the fissured Travertone ceiling. Most important of all, simply by installing handsome Travertone . . .



Airline Puts Ceiling on Noise

Comfort and efficiency are as desirable in the offices of an airline as they are at the airport and in the skies. To provide executives and office personnel with the quiet working conditions necessary for efficiency, TWA included noise-absorbing ceilings of Armstrong Travertone in the plans for their New York offices.

Travertone's fibrous mineral wool composition soaks up as much as 75% of the noise that strikes it, prevents the clatter of office routine from building to distracting levels.

The textured appearance of Travertone's handsomely fissured surface is well suited to the modern décor of the office. Its white paint finish helps diffuse light evenly without annoying glare. Completely incombustible, Travertone meets New York City's strict fire-safety regulations.

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BRIDGEPORT (Montgomery County), PA.



YOUNG MAN AT THE TOP, Pres. Louis V. Aronson, II, of Ronson Corp., is working back into black with cost cuts and new model lighters. Now he's also trying a . . .

Big Push With a Shaver

This week, the first of Ronson Corp.'s new U.S.-made electric shavers trickled off the production line in the company's new, brick-and-steel shaver plant in Stamford, Conn.

Wall Street last week gave an advance signal of what this means to Ronson and to the company's 32-year-old president, Louis V. Aronson, II (picture, above). Ronson stock bounced up from 11½ to 12½ overnight.

For the big Newark (N.J.) cigarette lighter manufacturer, the move into shavers marks a major break out of the narrow business track the company has followed for more than half a century. The breakout is more than just a new product try, too. It's the big push in a plan of campaign to get Ronson out of the rough ground it has been traveling over since 1952.

For Aronson, the full-scale effort to crack into the \$100-million-plus shaver market climaxes the first phase in his plan of recovery, diversification, and expansion for Ronson. The plan had its start in May, 1953, when he succeeded his ailing father as chief officer of the company.

• **Navy Man**—Five years before that, Annapolis graduate Aronson (Class of 1946) was a carrier officer in the Navy.

His business experience before he became Ronson president consisted of a short assignment getting its Air Products Div. off the ground, and a few months as his father's assistant.

• **Sick**—In the spring of 1953, when young Aronson took over, Ronson was sick.

From an all-time high of \$34.6-million in 1951, sales dropped in one year to \$28.5-million. The fat 1951 profit of \$3.5-million turned into a 1952 loss of \$1.1-million. Ronson stock was on its way down from 1951's high of 20½ to the low of 6½ it reached later in 1953.

In June, 1952, the patents had expired on Ronson's big feature—the one-motion action (Press, it's lit; release, it's out). Japanese imitations, priced far under Ronson, flooded the market immediately. Ronson's carefully nurtured dealer confidence in its ability to hold its place as leader in all but the low-price market disappeared overnight.

To top everything, distribution pipelines were solidly plugged; dealers had loaded up with Korean scare-bought lighters.

• **No Medicine**—No new Ronson designs had come forth to create an obsolescence factor. Zippo walked away

This Market Basket Feeds Millions

In 1954, National Distillers bought enough natural gas to fuel the gas furnaces of New York City for over a year . . . glass enough to glaze the windows in the United Nations building approximately 200 times, with some left over . . . and steel enough to fence in the whole continent of North America.

These are just a few of the 25,000 items we purchase, costing over \$100 million every year. To move them and the products they make requires every facility of America's vast transportation system. In fact, our tank cars alone, in just one month, cover enough miles to encircle the globe 23 times!

Every dollar National Distillers spends means income for someone—for the companies we buy from, for their employees, for the places where they spend their money. In this way, our "grocery bill" contributes substantially to the exchange of goods and services—an essential part of the life blood of America's economy.

Yes, our super-market is the whole U.S.A. And every item in our giant market-basket is needed in the manufacture or shipping of National Distillers' wide variety of products, which includes petrochemicals, solvents, intermediate and finished chemicals, as well as our famous distilled beverages, some of which are listed below—all serving the nation's growing consumer and industrial needs.



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65% GRAIN NEUTRAL SPIRITS, 86 PROOF. • OLD SUNNY BROOK KENTUCKY WHISKEY—A BLEND, 65% GRAIN NEUTRAL SPIRITS, 86 PROOF.
GILBEY'S DISTILLED LONDON DRY GIN, 100% GRAIN NEUTRAL SPIRITS, 90 PROOF. • BELLOW'S PARTNERS CHOICE WHISKEY—A BLEND, 60%
GRAIN NEUTRAL SPIRITS, 86.8 PROOF. • HILL AND HILL, BOURBON DE LUXE, BOND & LILLARD, OLD HERMITAGE, KENTUCKY WHISKIES.

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pants matching its use of power almost directly to the cooling load at any stage from 100% to 10% of capacity.

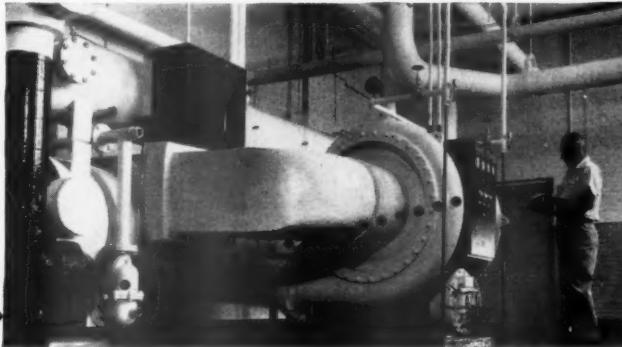
Thus when you incorporate UNISTRANE room units and the CenTraVac in your air conditioning system, you can cool one room or a thousand—singly or all at once—with both individual "climate control" and maximum economy.

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with the low-price (under \$5) business. The best remedy anybody could think of was a general increase in Ronson prices—strange medicine for a sick market.

Ronson's very high manufacturing costs made things tougher. Part of the Newark works had been a Civil War hospital. Old plant and machinery, outdated methods, use of substitute materials, a series of brushes with the Newark union—all ran up costs.

• **Way Out**—Above all, there was no apparent plan for dealing with these troubles when young Aronson took over. So the first thing he did was to set up a timetable of objectives.

He wanted: (1) to get Ronson in the black; (2) to strengthen management; (3) to diversify into lines that could use Ronson's name and distribution pattern; and (4) to fill out the top and bottom of the lighter line, develop new lighter styling and mechanical improvements.

Aronson knew that Japanese competition and heavy dealer inventories ruled out increased sales as the means of getting back in the black. The way to profits, he saw, was slashing production costs, and the most obvious way to start was a budget review.

• **First Steps**—The work force was cut 66%—from 3,600 in 1951 to about 1,200 now. Departments were consolidated. Aronson shut down Newark lighter operations and consolidated lighter manufacturing at East Stroudsburg, Pa. The relocation cost over \$1-million, but brought immediate payroll savings of \$40,000 a week, Aronson says. He sees a further 40% cut in lighter-making costs from now on.

At the end of first-half 1953 (Aronson's take-over was in May), Ronson's loss stood at \$500,000. By the year-end Aronson had swung that around to a \$400,000 profit. But cost-of-sales figures are perhaps a better measure of improvement. In 1952, it cost \$24-million to get sales of \$28.5-million. In 1953, though sales dropped some \$2-million, he lopped \$5-million off their costs.

• **Broadening Out**—The second part of the over-all plan, diversification and expansion, was partly under way when Aronson became president. He had already been running the Air Products Div. for a couple of years, and had put together a team to tap the government business market. He had scrambled around for orders until he had built up to a billing of some \$600,000 in such airplane components as rocket post assemblies.

• **Shavers**—The big expansion move, of course, is the shaver deal. When Aronson went to England late in 1953 to look over Ronson's wholly owned British subsidiary, the English manager showed him a shaver made by the West German firm, Max Braun Co. of Frank-

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further. Aronson could see it fitting neatly into Ronson's U.S. marketing outlets, some 65,000 drug, jewelry, department and similar stores.

The upshot was a 20-year deal, signed with Braun in February, 1954, licensing its manufacture in the U.S. The price was some \$15-million for the license, parts, and an initial supply of German-made shavers.

Aronson is bidding first of all for 10% of the more than \$100-million U.S. electric shaver market. Then, when cash rolls in, he wants to go after the leadership now shared by Schick, Remington, and Sunbeam. A new TV show this year, if it works out, may add zip to his bid.

The Stamford plant is scheduled to reach full production this summer. As the U.S.-made product takes hold, the supply from abroad will dwindle. But Braun will always supply one part: It has a secret process for making the flexible, very thin steel head.

• **Looking Ahead**—Aronson is pushing the expansion of Air Products Div. too. When he stepped into Ronson's top job, he started the division on the trail of some complete components to make, instead of the subcontracting job work it had been founded on. Right now he's shopping around for a company to acquire with a well established component line.

"With renewed aircraft buying," Aronson says, "this is going to be a good business. Eventually, we believe Air Products will gross some \$5-million a year." The increase for Air Products, plus shaver sales and an improvement in lighter sales, he says, "will double our billing" in two years.

He has a nearly all-new top level team working to make this come true. Out of eight key Ronson jobs, six are filled by his appointees. The Shaver Div. is run by a former Remington Rand vice-president, Air Products by one of Aronson's Annapolis classmates. He has replaced the old committee management with modern, highly decentralized operations.

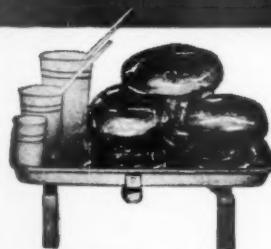
• **Gaining**—The lighter sales curve is already moving up—this January's sales doubled those of a year ago. There are two new models—one in the lower-priced field, and a new pocket lighter with a patented swivel-base for easier filling. There are new tricks in lighter accessories, too—such as a switch-spout fuel can. (Lighter sales fell to \$10-million in 1954, but accessories hit a new \$5-million peak.)

Next thing on Aronson's timetable is resumption of regular dividends (two quarterly dividends were skipped last year, and the total paid was 30¢, against \$2.35 in 1951). Aronson attributes most of last year's loss to nonrecurring expenses involved in the Newark-Stroudsburg consolidation.

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NEW RAPID has speed of 50 mph. System has 28 two-car trains, 12 single cars.

Selling Speed to

At precisely 11:10 a.m. next Tuesday, Mar. 15, a blue and gray rail car like the one above will roll out of a streamlined \$1.8-million station on Cleveland's east side. Within the car will be the governor of Ohio, senators and representatives, and various other notables. Having traveled for nine miles and 18 minutes, they will debark in Cleveland's Union Terminal. The period immediately following will be given over to oratory and fanfare.

This nine-mile ceremony will mark the opening of a rapid transit line serving the eastern side of the city. In the eyes of Donald C. Hyde (picture), manager of the Cleveland Transit System, it will also mark the beginnings of a really effective mass transportation system.

• **Miracle**—Like every other big U.S. city, Cleveland battles with the fact that people work here but live there. It

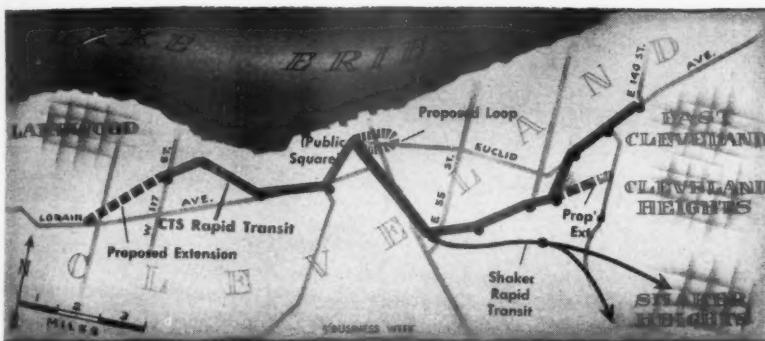
watches with wry amusement and vague horror while, each weekday, hundreds of thousands of people move into and out of its downtown area. That most of them make it on most days seems a miracle. That some of them don't on some days seems entirely logical.

In the past—aside from one rapid transit line—Cleveland's commuters have passed their twice-daily miracle in buses, trackless trolleys, and automobiles. The main trouble with these forms of transportation is that they all use the same routes—the highways and roads and city streets leading to and from the downtown area. In rush hours the cars and buses and trolleys move slowly, not because of any fault in the vehicles themselves, but because of congestion in the routes.

One obvious solution is the private right-of-way—a route that only a single vehicle or group of vehicles can use.



MANAGER Hyde bossed CTS into black, was voted head of American Transit Assn.



EASTERN HALF of line opens next week. Four-mile west leg will be complete soon.

Cleveland Commuters

That's the basis of rapid transit. That's why Donald C. Hyde, among other Clevelanders, will no doubt wear a delighted smile next Tuesday when the eastern segment of the city's new rapid transit system opens for business.

• **Ghosts**—As the map above shows, there is now and will be later more to Cleveland's rapid than the nine-mile segment dedicated Mar. 15. A two-pronged rail line has long been in existence, connecting the downtown area with Shaker Heights. This was built by the Van Sweringen brothers, fabulous Cleveland rail tycoons. A few months from now, a four-mile segment of rapid will be finished to the west of Union Terminal.

The 1955 stretch of rapid—the nine miles plus the four—will cost something like \$32-million. The Van Sweringens contributed much to this project, as well as building the Shaker Heights

line. For had it not been for them, the new 13-mile project might have cost \$80-million.

This is because the Vans, having built their Shaker Heights line, decided to build another. They obtained a right-of-way and went to work. They spent \$18-million on the project, then succumbed to the Depression and ill fortune.

Clevelanders thus had the skeleton of a rapid transit line handed to them from the past. The route was neatly mapped out, the right-of-way established, some of the grading done. All this was the Vans' contribution, and it saved mid-century Cleveland almost \$50-million.

• **Money**—To Hyde, the rapid line getting ready now is nothing more than the first step toward selling efficient mass transportation to the public and making it pay.

Hyde has made mass transport pay in

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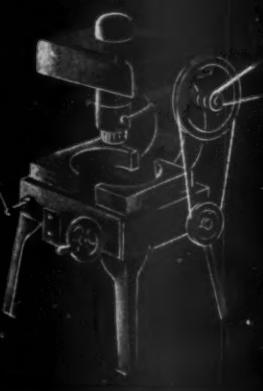
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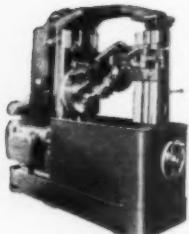
Machine tools are among those things with which time deals harshly. With every turn they approach obsolescence... some at breakneck speed, others with a creeping slowness that sometimes defies detection.

The tax laws say age determines the productive value of machine tools. Production men know better. It's obviously the amount of use that wears them out. Even when they're not run at peak capacity, improvements in new machine tools make old ones a costly burden on efficient production.

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Cleveland since 1948. He became acting general manager of the Cleveland Transit System in 1946. CTS was in the red then. But it broke into the black in 1949, and has been there ever since. Hyde and CTS cut costs, upped fares, and despite a dropoff in riders, pushed profits to a postwar high of \$555,284 in 1952. Last year CTS had a net of \$100,682.

Hyde figures that the profit a transport system might make is directly related to the quality of service its customers get. He foresees a city-wide chain of quick transportation. But he knows that the chain will have to be forged slowly, for it is expensive.

The money for the 1955 project came mostly from a \$29.5-million Reconstruction Finance Corp. loan, secured by revenue bonds from CTS as an independent transit authority. When RFC was liquidated, the bonds were resold to private investors. Nobody knows yet where the money for other links in Hyde's chain will come from.

• **Links**—The No. 1 item on Hyde's list for the future is a downtown loop subway (map), a project authorized by the voters two years ago but so far lacking any financial flesh and bone. This subway would get people here and there in the downtown area, to which they would be delivered by the longer-range transit lines. Estimated cost is \$50-million.

Hyde also has some ideas on how to improve bus service to the city's hub. He would like to build special arteries for use only by transit vehicles, set off certain existing streets and street lanes for buses exclusively. Such projects as this would make the bus routes virtually rapid transit lines, for the buses would be traveling on essentially private rights-of-way.

• **Revenue**—As Hyde sees it, the new rapid system will bring in substantial extra revenue for CTS only if the new riders are ex-motorists. If the new riders come from existing CTS bus and trackless trolley lines, revenues will increase very little. (CTS plans to charge 20¢ a ride on the rapid transit lines, against the 15¢ standard fare on buses and trolleys.) Thus, in Hyde's view, the important thing is to make the service good enough to attract those commuters who habitually drive to and from work.

The act of attracting drivers-to-work will not only mean revenue for CTS; it will directly attack the problem of street congestion downtown. Hyde does not agree with those civic planners who try to solve the problem by widening streets, building parking lots and expressway systems. He thinks this does nothing but induce more people to drive to work, thus keeping the ill eternally one jump ahead of the remedy. His view is that the only way to clear



The Standard Oil Company of Ohio, Cleveland, Ohio. Architects: Garfield, Harris, Robinson and Schafer

Sohio transforms garage into modern offices made permanently efficient with Mills Walls

Faced with the necessity of expansion in office space, The Standard Oil Company of Ohio converted a downtown Cleveland garage building into attractive, efficient, modern offices with interiors of Mills Movable Metal Walls. While other remodeling work on the building was in progress the interiors were fabricated at the Mills factory, permitting Sohio to take early occupancy of its new offices.

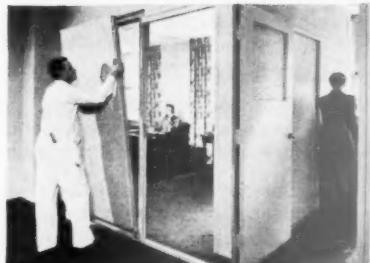
But the most important advantage of Mills Walls for Sohio is the *space control* they provide. Whenever changes in space requirements occur, these walls can be rearranged to fit new layouts—usually overnight or during a week end, with minimum labor and at very low cost. They promote efficiency by facilitating the most effective use of space at all times.

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We invite your further investigation of Mississippi and its BAWI plan. Your request for information will be handled promptly and treated with confidence.



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streets is to get rid of the autos.

That's why Hyde looks with affection upon public transit vehicles—not only rail cars, but buses and trolleys as well. He repeatedly quotes statistics showing that of all the road vehicles moving in and out of downtown Cleveland on a typical day, less than 1 in 20 are public transit vehicles. Yet these buses and trolleys carry over half the people.

• Speed—Hyde's job, then, as he sees it, is to get the people out of cars and into public transport. He and CTS are, in effect, in competition with the automobile.

It's an axiom of business competition that you win by offering something better or cheaper. Hyde and CTS figure they'll win by offering speed. They admit low fares, newer equipment, and frequent runs are important, but "it takes something more to make people voluntarily use public transit."

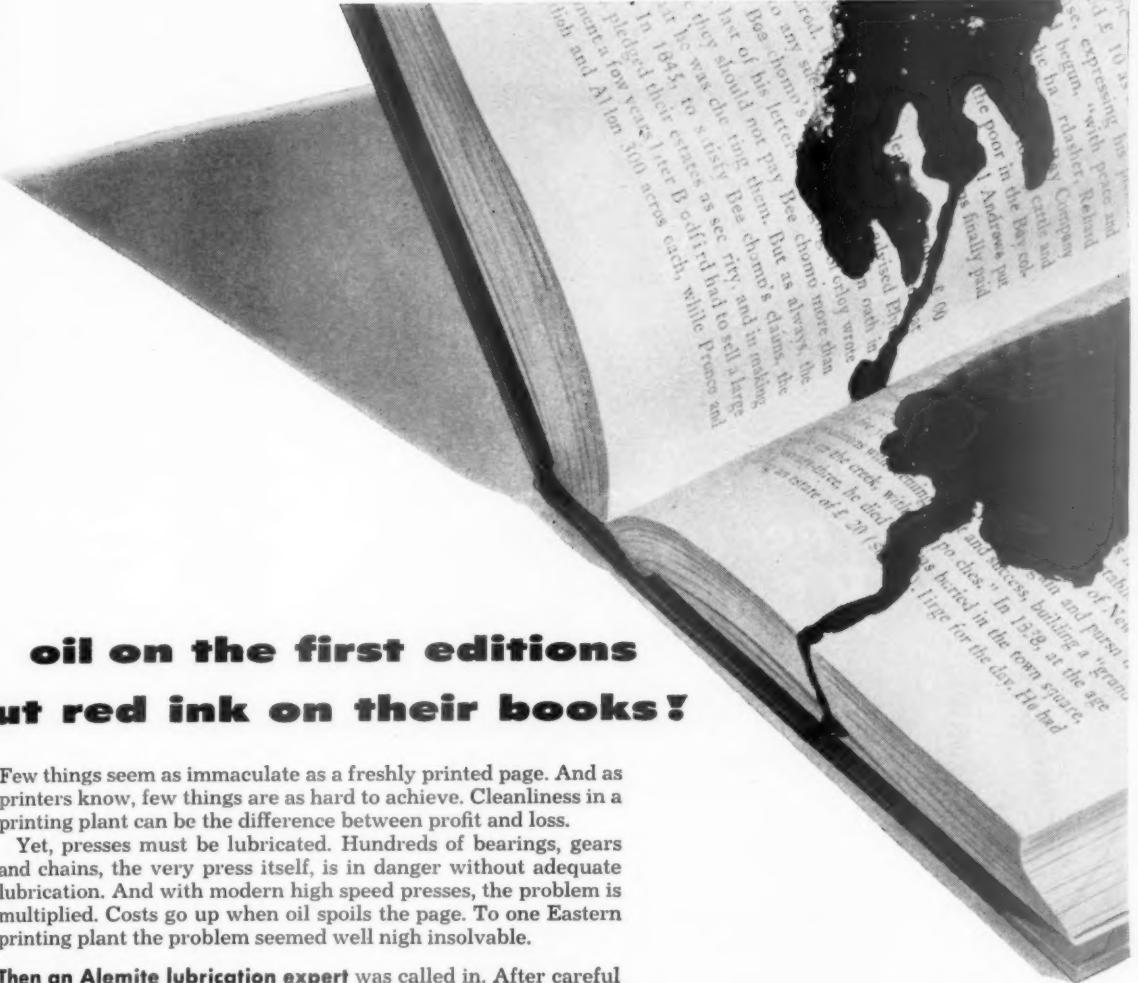
Hyde points to the experience of other cities to support his argument. Cincinnati's transit fleet is made up entirely of postwar vehicles, yet it has lost 45% of its riders since the war. The St. Louis transit company practically doubled its service on some lines in an experiment in 1951 aimed at building traffic. But the increase in riders wasn't enough to pay for the added cost of gasoline and power. The New Orleans local transit system, Hyde says, charges a local fare of 7¢, probably the nation's lowest, but its revenue doesn't pay for costs.

• Express Buses—Hyde's emphasis on speed shows up not only in the new rapid transit system, but in the system of express buses he and CTS worked out after World War II.

In most cases, Cleveland's express bus service has been set up by making two runs out of what was once a single long run. The inner portion of the route is served by a local bus or trolley that pushes its way into the downtown area. The outer portion is handled by a bus from outlying areas. This is a local until it meets the inner vehicle; then it becomes an express.

The express bus system has paid off in increased revenue. Between May, 1949, and May, 1952, fare increases upped the revenue on both local and express lines. But the revenue hike was 32.6% on express lines, nearly a third more than on the local lines. This proves to Hyde that the faster you contract to move commuters, the more likely they are to use your service.

Hyde sees the new rapid transit system as only an extension of the speed idea. Eventually, he hopes, present-day express buses will become feeders for a network of rapid transit lines. However, Cleveland citizens like the express bus system as it stands now, and Hyde is playing his bus cards close to the vest until he sees how popular



oil on the first editions put red ink on their books!

Few things seem as immaculate as a freshly printed page. And as printers know, few things are as hard to achieve. Cleanliness in a printing plant can be the difference between profit and loss.

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the rapid transit system will prove.
• **Wrong Place?**—There are some in Cleveland who think Hyde and CTS made a mistake in following the Van Sweringens' rapid transit route, even though the procedure saved money. These citizens say CTS ignored the areas that became densely populated after the Vans faded away.

It's probable that future extensions of the rapid system will go into those areas—the southeast and southwest of the city. Hyde's present thinking is that any extensions will have to be run along existing railroad rights of way, where trackage can be leased or rented, and all CTS will have to buy will be rolling stock. What it will do the buying with is not clear just now, for CTS is already heavily mortgaged. It will probably have to depend on city or county bonds, or on some form of municipal money.

• **Like a Business**—Hyde does not foresee the day, even in the far future, when he and CTS can relax. He doesn't think either his express buses or his rapid transit line have solved Cleveland's mass transportation problem. Hyde, who came to CTS from a privately owned transit operation in Milwaukee, thinks his system will have to improve its service continually, just like any other competitive business.

When he talks of improving service, he means only that: lower fares rank quite low in his scheme of things. "I sometimes wonder," he says, "how many more transit riders we'd have if the service were free. It's free for most transit company employees—yet many of them drive to work. Doesn't this support the idea that service is more important?"

REGIONS BRIEFS

A new state agency—"to stimulate business and attract new business"—has been proposed in a bill in the New York State Legislature. It would be headed by a \$25,000-a-year businessman, would coordinate the work of the existing departments of banking, insurance, commerce, and public service.

Real estate taxes of Missouri public utilities may be cut as much as \$2-million by reassessment—and lower tax rates—in 26 counties. Utilities worked three years to prove their contention they weren't getting equal treatment.

Pennsylvania's Gov. Leader will push for legislative O.K. of a bi-state compact with New Jersey to develop Delaware River water. The pact calls for a \$60-million dam in Pike County. New Jersey has already voted for it.

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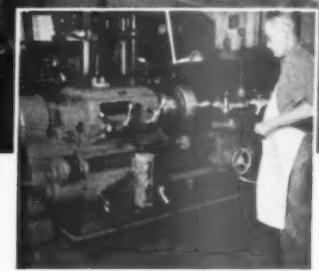
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rest colors and by using colors on machinery that differentiate working from stationary parts, according to COLOR DYNAMICS, we have relieved eye strain and reduced physical fatigue. An appreciable part of the reduction in re-work and scrap can be attributed to this improvement of our operators' environment.

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Building His Second Empire

Cyrus Stephen Eaton, 71-year-old business giant, let it be known a few weeks ago that he had bought substantial interests in two electric utility companies—Kansas City Power & Light Co. and Cleveland Electric Illuminating Co. (BW-Mar. 5 '55, p34). At this point, Eaton began the last sweep of his career's second great cycle through the worlds of high finance and big industry.

The first cycle of this fabulous 47-year career ended in the 1930s, amid general economic disaster. Now:

• For the second time in his life, Eaton is building an interest in the electric utility industry—the area that gave him his start and netted him his first million dollars. His two latest acquisitions represent his first move into the field since he sold vast holdings in it during the early 1930s.

• For the second time in his life, Eaton stands at the controls of a huge fortune. His first fortune, reputedly about \$100-million, cracked and disintegrated during the Depression. His second is bigger, though only a few men know by how much.

• **Empire**—In buying into electric utility companies once more, Eaton disclaims any dream of building a utility empire to match the one he had in the early 1930s. That one was the nation's third largest; it ranked in value only below the immense utility networks of tycoons Sidney Mitchell and Samuel Insull.

Eaton says his new interest in electric utilities stems from quite ordinary business considerations, not necessarily those of a man who would be king:

• He believes his big store of knowledge and experience will prove an asset to any utility in which he invests.

• He senses a trend away from government ownership of the electric power industry, and this pleases him as an investor.

• He foresees good times for the two companies he has bought into. Both, in his opinion, have (1) smart management and (2) the prospect of increased demand for their product.

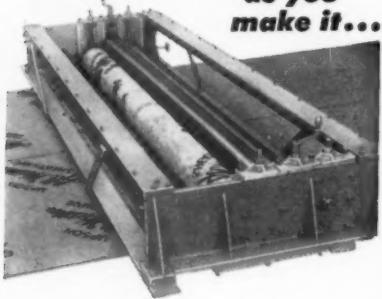
Eaton says he has no idea at this time where his investments in the industry will end. Certainly, he intends to be more than a casual stockholder.

He is rumored to have acquired stock options in two other electric utilities, and there are some observers who see all this as the beginning of a second Eaton utility empire. However, even these observers are sure Eaton will never again reach his former heights in the industry. Present federal regulations, if nothing else, preclude that.

• **Builder**—There are many forces today that make it hard for a single businessman to become really big, in the pattern of such men as J. P. Morgan and John D. Rockefeller. There are new public philosophies, heavy taxes. Talk of business bigness today is likely to refer to corporations, to management teams rather than single men.

But there are powerful single individuals in the American scene today, and Eaton is one of them. He is perhaps even more intriguing than most of the others, for this is his second time at the top. He built and lost a kingdom in a day when many other men were doing the same. Then he tackled a totally new environment, learned its rules, and doggedly built a second king-

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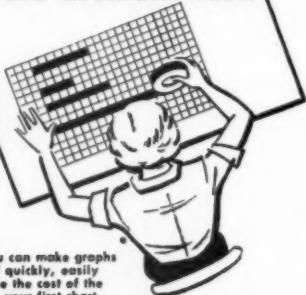
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" . . . he met Rockefeller,
whereupon the course of his
life changed abruptly . . . "

EATON starts on p. 123

dom when many other giants of his early era had gone into morose retirement.

Here is how he did it.

I. The First Empire

Cyrus Eaton was trained originally for the Baptist ministry, and it may be to this fact that he owes his present eminence in the business world. His uncle preached at a Baptist church in Cleveland frequented by the magnate John D. Rockefeller. Young Eaton, one summer, paid an extended visit to his uncle with the object of learning more about the church. He met Rockefeller, whereupon the course of his life changed abruptly.

For three summers thereafter, Eaton worked as a clerk in one of Rockefeller's enterprises. Upon graduation from college, Eaton found a full-time job as clerk waiting for him. He took it, for he had decided by this time that his career lay this way rather than in the ministry.

In 1907, though he did not recognize it as such, the cornerstone of his two empires was laid. Rockefeller interests sent him to Manitoba, Canada, to secure a franchise for an electric power plant. Eaton got the franchise, but subsequently the interests behind him decided they didn't want it after all. They asked Eaton if he would like it for himself.

Eaton was just a young man, in his mid-20s. But he figured there was a chance here to make some big money. He took the franchise, borrowed heavily, and built an electric power plant at Brandon, Manitoba. In 1909, he sold it at a handsome profit. This gave him his initial stake.

• **Utility Group**—From then until the early 1930s, Eaton spent much of his time gathering an immense group of utility companies. His holdings stretched throughout the Midwest, and from Canada to Brooklyn. Most of them eventually became consolidated under the corporate chieftainship of United Light & Power Co., a utility that served cities in Michigan and Illinois and that Eaton controlled.

During this period of utility empire-building, Eaton became part of the financial catastrophe that broke the back of Samuel Insull's huge Midwest utility empire. Eaton has been blamed widely for the catastrophe; he himself maintains that he and Insull were friends, that the whole thing was the

result of a miscalculation by Insull and his advisers.

What happened was this: Eaton had a \$65-million interest in two Chicago utilities, Commonwealth Edison Co. and Peoples Gas Light & Coke Co. He sold this interest to Insull at that price. The huge debt proved too much for Insull's financial sinew to take, and the Insull utility companies slowly collapsed.

Observers who blame Eaton for the calamity say that Eaton, as a competitor of Insull, must have known that the combination of debt and competition would mean trouble for Insull. Eaton denies this.

• **Shares**—While building up his utility empire, Eaton was also busy on another project: Continental Shares, Inc. He formed it in 1926, nominally as an investment trust. Actually, it became a combination investment-holding-financing agency. It grew fast. Its capital and surplus soared from \$2.5-million at the end of 1926 to \$123-million as of Sept. 30, 1930, the last year in which Eaton headed the company as board chairman.

The company's assets went into the securities of all kinds of companies. Among them were Eaton's United Light & Power, together with big steel, coal, rubber, paint, and paper companies. Shares of Continental were listed on the New York Stock Exchange, and at one time were quoted at \$300.

• **Steel**—Still a third project occupied Eaton's thoughts in the years before 1930. This project envisioned a huge, fully integrated steel company that would challenge the supremacy of U.S. Steel Corp.

The idea had its birth in 1925, when Eaton stepped into the financial tangle of Trumbull Steel Co., Warren, Ohio, and emerged as the controlling interest. With Trumbull in his possession, Eaton quickly acquired several small iron and steel companies. Out of a somewhat confused mass of corporate identities, eventually, emerged Republic Steel Corp.

The next step, as Eaton planned it, involved Inland Steel Co., in which he had a large financial interest. Inland would buy the controlling interest in Youngstown Sheet & Tube Co. Then Inland would be consolidated with other Eaton steel enterprises, and the result would be the second-biggest U.S. steelmaker.

But the plan never came off. Trouble now began to strike Eaton from right and left. One by one, the parts of his empire disintegrated:

The steel plan met trouble in the person of Bethlehem Steel Corp., which did not view happily the idea of losing its second-place ranking in the industry. It launched an attempt to buy Youngstown Sheet & Tube, one of the pillars

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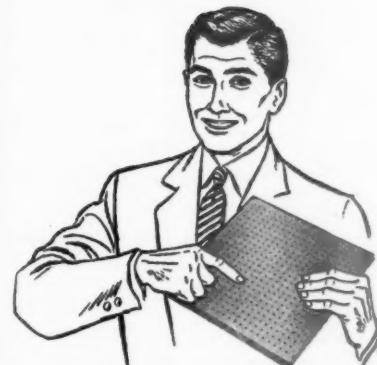
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EATON had taken a terrific financial beating—how bad, nobody but he has ever known.

of Eaton's proposed giant company. Eaton countered with a court suit to halt the Bethlehem-Youngstown deal. A long battle followed, during which all Eaton's steel plans had to lie dormant. Eaton emerged the winner, but the court proceedings had cost him a huge amount of money. Not only that; when Eaton staggered out of court, the country was struggling with the Depression. Eaton had to banish his steel dream on the spot.

Continental Shares, meanwhile, had likewise come upon hard times. The 1929 stock market crash had brought the roof down upon the company. Its annual statement as of Dec. 31, 1931, showed a writeoff in stock values of more than \$90-million since the previous year's report. In 1930, for instance, the company had valued some 416,000 shares of United Light & Power at \$32.8-million; a year later, it valued 449,000 at \$5.3-million.

The utility empire dissolved early in the 1930s largely as a result of new federal regulations. Eaton was forced to dispose of great pieces of his holdings.

Thus, as the Depression took hold of the country, Eaton stood amid ruins. He had taken a terrific financial beating—how bad, nobody but he has ever known. He retired to his century-old farmhouse in a Cleveland suburb to lick his wounds.

II. The Second Empire

Cyrus Eaton is a man of great, fierce pride. He may not seem so to a casual visitor; for he is a quiet man, almost bookish. He is a calm, charming host. He does not smoke, and he drinks very sparingly. He never loses his temper in public, never raises his voice, never even admits the existence of enemies—only "detractors," or people with "different philosophies." The loss of his fortune did not bother him nearly so much as

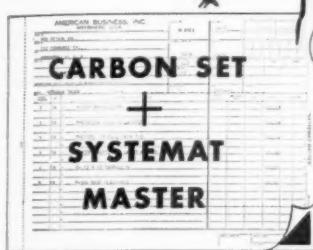


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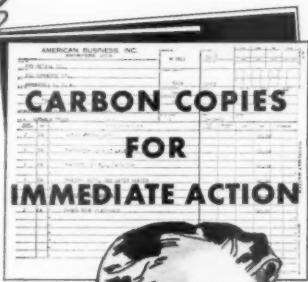
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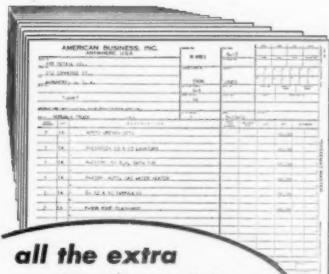
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"...from now on, he can get all the financial backing he wants..."

EATON starts on p. 123

the loss of personal prestige. Before the 1930s, he had been in constant demand by railroads and industrial companies in need of directors and advisers. Now, he found himself being ousted even from companies he had helped create.

• **Otis**—Eaton began his long return climb on the ladder of Otis & Co. This was an investment banking company of which Eaton was majority owner; it was one of the few valuable possessions he had salvaged from the Depression.

Eaton had always been critical of negotiated agreements between underwriting companies and their clients. He favored sealed bids, and during the late 1930s and early 1940s he pushed a fierce crusade for general acceptance of his philosophy. This crusade did two things for Eaton: It made him and Otis & Co. felt throughout the financial community, and it gained him a powerful friend: Robert R. Young.

Young had moved into the Cleveland scene to buy up the tangled railroad holdings of the Van Sweringen brothers. He fell in with Eaton and cheered Eaton's philosophy loudly. Otis & Co. steadily gained business. By 1946, it was one of the top 10 underwriting outfits in the country.

• **Trouble**—Otis & Co.'s road was not all smooth, however. About five years ago the company became involved in a rough court argument with Kaiser-Frazer Corp., an Otis client. Otis headed a syndicate that had agreed to offer the public a \$10-million issue of Kaiser-Frazer common stock. Then, for reasons that differ from one account of the case to another, the syndicate backed out, refused to handle the offering. The long legal battle at one point came close to putting Otis & Co. out of business.

The company emerged from court with a clean bill of health. But it is functioning in a much more limited way today, as a sort of private banking agency rather than a retailer of securities.

• **Rails and Steel**—Otis & Co.'s early success put Eaton back on his feet, however. He determinedly set about building his second empire. One by one, he gathered these segments:

Chesapeake & Ohio RR. Eaton's association with Young turned his eyes to this railroad, and he began buying into it soon after Young pulled it out of the Van Sweringen tangle. Today, Eaton is principal stockholder and chairman of the board.

Portsmouth Steel Co. This was formed in 1946 by Eaton and some

friends to take over the Portsmouth, (Ohio) works of Wheeling Steel Corp. Eaton eventually sold the physical property to Detroit Steel Corp. Despite stockholder opposition, he kept Portsmouth Steel's corporate shell as a holding company, and has now invested some of its money in Follansbee Steel Corp. Portsmouth Steel money is also invested in:

Cleveland-Cliffs Iron Co. This is an iron ore producer of which Eaton has been a director for 30 years. It was to have played a part in the giant steel company he envisioned in his first empire. It gets some of the ore it sells from:

Steep Rock Iron Mines. Eaton financed this mining venture with a loan from Reconstruction Finance Corp. It has been producing well over a million tons of rich ore per year, and is expected to double its output this year or next.

West Kentucky Coal Co. This company had once been the property of a public utility holding company, but was divested under government orders. After a period of backing and filling by Young, Eaton, and a third bidder, Eaton emerged with (1) the stock and (2) chairmanship of the board. Eaton denies reports that, in this deal, he was acting on behalf of his friend John L. Lewis, president of the United Mine Workers.

• **Other Segments**—There are many more parts to Eaton's second empire. He is a director of Sherwin-Williams Co., as he was in his first empire. He is the principal owner of an estimated billion tons of iron ore, as yet undeveloped, on Ungava Bay, Quebec.

There is little doubt in the minds of Clevelanders that from now on, no matter what enterprise catches Eaton's eye, he can get all the financial backing he wants. His association with Robert R. Young is known to be close: Indeed, there are some who say Eaton's spectacular recovery in the past seven or eight years has come about largely through Young and his allegedly huge sources of money in Texas. This is sheer speculation. But whether it is true or not, it's reasonable to suppose that Young will give Eaton backing if he asks for it.

• **At Home**—Will he ask for it? Nobody knows but Eaton. He says he will stay in the business of making money until his health, which is rugged, ceases to be so.

When he retires, it will probably be to one of his two cattle farms. One is near Cleveland, the other in Nova Scotia, where he was born. He will retire to his cattle and his books, both of which he loves. But it is doubtful that, even then, he will neglect business news and the daily stock market report.



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LABOR

Target for Strike: GM or Ford?

● Contracts run out at about the same time, so it could be either. It could even be both, though Detroit doesn't think so.

● It would cost the union less to walk out at Ford, but UAW politics might dictate a major push at GM.

● Anyway, a strike would be a last resort. UAW has lately had friendly relations with both auto companies, and it still hopes one of them will pioneer a deal.

"Who are they gonna hit this spring—General Motors or Ford?"

Anyone connected with labor or management in Detroit gets this question tossed at him many times a day now that auto contract bargaining is drawing near. Nobody has an answer. Perhaps even the United Auto Workers (CIO) doesn't know for sure, yet. But speculation is running high.

The General Motors Corp. contract expires first, May 29. The Ford Motor Co. contract runs out two days later. Negotiations will be going on simultaneously. So far, there are no real signs that either GM or Ford will give anything other than a firm "no" to UAW's guaranteed-wage demand.

In that case, what happens? A strike? If so, it could be against both GM and Ford though Detroit is inclined to discount such a possibility. So the question narrows down to: which employer?

• **Shifting Strategy**—Bargaining is a give-and-take process of compromise, and union strategy—like management's—has to be flexible. When it is directed simultaneously but separately at two employers of the stature of GM and Ford, the strategy must be free-moving enough to be turned to conform with management's shifts at the bargaining table. If one employer shows a willingness to work out a deal, union negotiating pressure will automatically grow on the other.

In the auto bargaining, this can work either way. That's what makes it so hard to give a straight answer to the big question: Who'll be struck?

However, some of the factors that will go into the answer can be traced:

• UAW would probably prefer a contract settlement, first, with GM—because what it does would more likely set a firm pattern.

• While the union is determined to strike, if necessary, for a guaranteed wage or guaranteed employment, it still

hopes that a walkout can be avoided. It notes that both GM and Ford have "pioneered" in injecting new ideas into labor contracts.

• Strictly from a cost standpoint, UAW would rather strike Ford than GM, should a strike seem necessary. Even a \$25-million strike fund (the amount UAW contemplates) might not be enough to support a long GM walkout—but it would probably be adequate for a strike against Ford.

• In a toss-up between GM and Ford, union politics might become involved in a decision. GM locals are strongly tied to UAW's Pres. Walter Reuther, Ford locals to Carl Stellato, a politically ambitious Reuther critic.

• **GM and UAW**—Since the sitdown strike of the late 1930s and especially since the 114-day strike of 1945-46, General Motors has generally shown a cooperative attitude toward UAW. In 1948, GM negotiated a pattern-setting contract with UAW that linked wages to living costs through an escalation formula. Two years later, the corporation signed a five-year contract with UAW that continued the tie between wages and living costs and also provided an annual-improvement-factor raise. Under this contract, without further bargaining, GM wages have gone up 44¢ an hour in five years.

When the escalation formula was written into the GM contract in 1950, UAW joined with the corporation in describing it as "historic" (BW—May 27 '50, p102). The union also praised the corporation for its "far-sighted" policy when GM agreed to sit down and negotiate amendments to the five-year contract, in midterm, after UAW introduced its "living document" theory of contracts in 1953.

While GM has indicated in bargaining preliminaries that it opposes the guaranteed wage in principle (BW—Mar. 5 '55, p120), it has made clear that

it strongly favors long-term contracts and would like another.

UAW will enter bargaining opposed to any contract for more than two years. But two things should be kept in mind: (1) GM is not adverse to introducing new ideas into its contract; and (2) any deal on guaranteed wages, offered in return for another five-year contract, will probably find UAW receptive—unless negotiations at Ford appear to be moving toward a guarantee plan without a long contract term.

• **Ford and UAW**—Ford also has pioneered through the years in new industrial relations policies. It was the first to give the union shop to UAW, and the first to agree to a major pension plan in the auto industry. Later, in 1953, Ford also agreed—in a voluntary reopening—to increase pension benefits.

Ford has come off comparatively well in its tilts with UAW. The company has had only two national strikes, both of short duration. One came in 1941 as a result of the union's demands for recognition. The other occurred in 1949 over a somewhat nebulous "speedup" issue.

Because Ford workers have never had to give militant strike support to a UAW contract drive, many in Detroit speculate that this is Ford's year for concentrated union pressure and, if necessary, a walkout.

• **Matter of Costs**—Such things as these may, of course, have no bearing on union strategy. Some say money may be a big UAW consideration.

Nobody wants a strike. If GM's figures on the size of the auto market this year are accurate, talk of the "need of an auto strike to clear warehouses" can be discounted. A walkout against either of the two major producers could, in fact, be extremely costly. It could be costly, too, for the union.

You can be sure of this: Both management and labor are extremely conscious of the probability that any strike on the basic issue of guaranteeing pay could be a long one—it would involve a matter of principle as well as labor costs, and a compromise on such an issue is difficult.

So, suppose both GM and Ford say a flat and final "no" on the guaranteed wage. What would UAW face in the way of strike costs?

• GM has more than 380,000 hourly-rate employees in its domestic plants. If UAW should pay an average of \$10 a week to GM strikers (and some in UAW are talking of \$25 a

Model 145 Dart Truck equipped with Allison TORQOMATIC DRIVE being loaded at Sunnyhill Coal Company's New Lexington, Ohio, mine. Truck is one of 10 operated by Sunnyhill.



10 trucks replace 30 —cut costs 62%

WHEN 10 50-ton trucks equipped with Allison TORQOMATIC DRIVES replaced 30 mechanical-drive 20- and 30-ton trucks at Sunnyhill Coal Company's New Lexington mine:

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week) union costs would range upward from \$3.8-million a week.

• Ford has about 140,000 employees, less than half as many as GM. The same average \$10-a-week strike benefit would cost UAW \$1.4-million.

These figures do not include the administrative costs of a strike—for newspaper ads, radio time, and the like.

If finances were a major consideration, UAW might choose to strike Ford rather than GM. It could stretch its available funds much further.

• War Chest—The auto union's annual report, just released, shows a strike fund of about \$7.3-million now. The fund dropped by \$363,367 in 1954 because of the high cost of two small but long walkouts—the 10-month strike against Kohler Co., in Wisconsin, still going on, and the recently-ended 110-day strike against Ford Motor Co. of Canada. But UAW isn't counting on only this \$7.3-million.

Delegates to UAW convention in Cleveland, to open Mar. 27, will be asked to increase dues "temporarily" from \$5 to \$7.50 a month until a \$25-million strike fund is in the bank; dues would then revert to \$5 a month as long as the fund remains above \$15-million.

If this plan is approved, and it's likely to be, UAW expects to have \$25-million on hand for strike support shortly after General Motors or Ford bargaining reaches a deadline in June. It would also have a strike fund income of about \$6.5-million a month.

• Arithmetic—A little simple mathematics would show that UAW strike funds—including the anticipated monthly income during a strike—would sustain a GM strike for only nine weeks compared with an indefinite period for Ford.

However, the arithmetic is too simple. UAW is now so well disciplined that strike benefits could be omitted, delayed, or given and later withdrawn without resulting in a back-to-work movement. UAW's last big strike—15 weeks against Chrysler in 1950—actually cost the union only about \$4-million.

• UAW Politics—Another possibly important factor in determining which company UAW will hit this spring is its internal political structure.

• GM locals are firmly in Walter Reuther's camp; they are controlled locals and can be counted on to follow the guidance of international UAW.

• Ford locals, on the other hand, are less solidly behind Reuther; they take their guidance more from Carl Stellato, president of Local 600. Stellato and his policy-making aides in Local 600 are more interested in winning a shorter work week than a guaranteed wage, largely because of their strong fears of Ford automation. They are also strongly opposed to long-term contracts and to any policy of automatic pay boosts—c-of-1 and productivity

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raises, for instance. They prefer six-month wage reopenings.

Stellato told his 60,000-member Local 600 recently that "politics and personal differences" between Reuther and him have been "cast aside" in view of the 1955 bargaining fight. It is rumored in Detroit that the two men have reached an agreement of convenience on bargaining strategy. According to the report, Stellato is pledged to a shoulder-to-shoulder fight beside Reuther for a guaranteed wage and a short-term contract in 1955, and Reuther is pledged to making Local 600's short-week objective UAW's No. 1 bargaining goal during the next negotiations—whether the guaranteed wage wins or loses this year.

However, rivalry of ideas and leadership between Reuther and Stellato is by no means settled for good, and it may yet become an important factor in the guaranteed-wage battle.

More Wage Cuts...

... in UAW plants loom, as two companies pressure union to help them through a famine period.

Competitive pressures have led two more firms in the stronghold of CIO's United Auto Workers to ask the union to go along with pay cuts.

Last year two auto firms, Kaiser-Willys in Toledo (BW-Apr. 24'54, p144) and Studebaker in South Bend (BW-Aug. 21'54, p122), got UAW to agree to drop incentive pay plans, with a result that on the surface at least looked like pay cuts. Then an auto supplier, Pressed Metals of America, at Maryville, Mich., tried the wage cut idea, but with little success.

Now big Electric Auto-Lite Co., in Toledo, one of the giants among auto suppliers, says it has to cut the pay of its 6,300 workers to remain competitive; and in Jackson, Mich., Sparks-Withington Co. says that if it can't cut the wages of the 750 employees in its Television Div. (represented by UAW) it will have to close the plant.

• No Trend—No one in labor circles in Detroit professes to see any trend in the wage cut requests. At the same time, a request of UAW to agree to a wage cut was practically unheard of until a year ago, when Kaiser-Willys talked UAW into it. However, a sort of fluid wage arrangement exists by a union-management gentlemen's agreement at some feast-or-famine machine shops in Detroit.

The two latest instances stem from different causes. Auto-Lite had a bad 1954, chiefly because its principal cus-



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tomer, Chrysler Corp., had a bad year. While Chrysler business has turned up—and Auto-Lite's, too—the upturn hasn't been fast or sharp enough to overcome Auto-Lite's 1954 setback. At the end of last week, the local bargaining committee had rejected the proposal without closing the door. A union man said something might still be worked out if things are really as bad as the company said.

• **Out of Line**—The Sparks-Withington situation has a twist all its own. As long ago as last October, John J. Smith, company president, asked the union to take a cut of 18¢ an hour—which finally was put up to a union vote and rejected last week. The 18¢ represents the amount the workers get under escalation and improvement-factor clauses in a contract that went into effect in 1950. In other words, the company has an auto-type contract for work in the TV field. That's Smith's objection.

Smith says his company's Television

Div. pays the highest wages in the TV industry, averaging \$2.02 an hour, vs. \$1.73 for the industry average; that his company is the only one in the TV business with escalation, improvement-factor, and pension clauses. UAW says the Philco plant in Sandusky, Ohio, pays higher wages and has just as many fringe benefits.

• **Results**—Smith claims that because of his high labor costs he has had to sell his TV sets below cost, contributing to a loss in the last fiscal year of more than \$400,000. James A. Morgan, assistant UAW regional director, says the company's troubles are due to "mismanagement and bad merchandising."

Before last week's vote, Smith said that if the cut was turned down he either would shut down the TV division at Jackson and move where labor costs were lower, or farm out the work to other manufacturers. Immediately after the union vote, he wouldn't say what he would do.

Merger Interest Spreads

Firemen & Enginemen may be first rail brotherhood to tie up with merged AFL-CIO . . . Glass unions sift unity plans . . . AFL Machinists and CIO Auto Workers gang up on independent craft group.

It's rumored that the Brotherhood of Locomotive Firemen & Enginemen may move quickly to unite with a merged AFL-CIO. BLF&E authorized its officers in 1947 to take whatever steps toward mergers or new affiliations that might be desirable. Since the power has never been voided, Pres. H. S. Gilbert and other BLF&E officers are in a strategic position to act on any unity bid.

There is little doubt that one will be offered. AFL-CIO merger proponents foresee the early entry of the major rail brotherhoods—now independent—into labor's new "single trade union center" (BW—Feb. 26 '55, p102).

BLF&E has a claimed 100,000 members. It attempted to work out a merger with the Brotherhood of Locomotive Engineers several years ago, but failed. Recently, BLE has been increasing pressure on BLF&E wherever interests conflict.

According to talk in Cleveland—home of the brotherhoods—and Washington, BLE isn't likely to rush into a merged AFL-CIO; its policymakers have always felt that more can be gained by independent status. BLF&E, on the other hand, reportedly feels that it would be able to pick up strength through a merger.

The Brotherhood of Railroad Train-

men is also on record as considering affiliation with a united AFL-CIO (BW—Feb. 19 '55, p25).

AFL's International Assn. of Machinists and CIO's United Auto Workers are collaborating against a new independent union of tool-and-die makers—set up in October, 1953, in an effort to snatch high-skilled craftsmen away from unions that also bargain for production workers.

The new organization—the International Assn. of Tool Craftsmen—broke away from IAM in Rock Island, Ill., contending that craftsmen would fare better in bargaining if they weren't tied to less-skilled groups. It has recruited a number of small groups in tool rooms and die shops since then, and is now concentrating its organizing in the Rock Island-Moline-Racine (Wis.) area.

National Labor Relations Board petitions for three craft elections are pending against IAM and UAW. The rival unions, working under "no raiding" and "mutual assistance" agreements, are pooling efforts to oppose the scheduling of NLRB.

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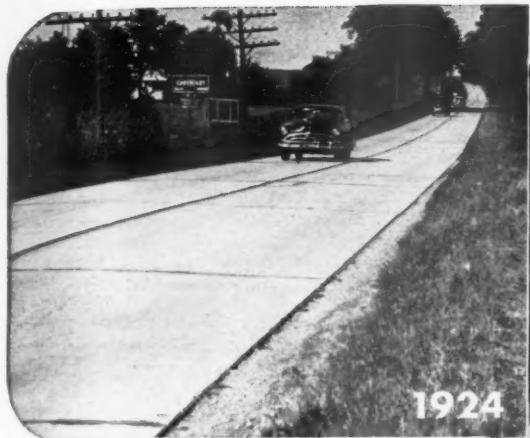
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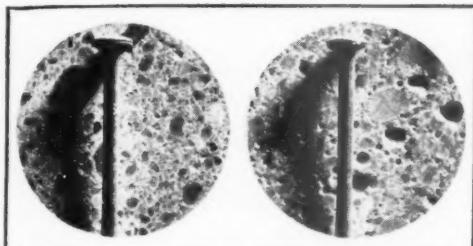
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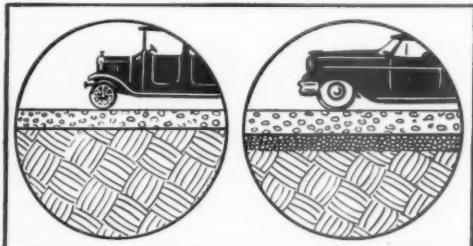
The 1924 road has served 30 years at low annual cost, but...



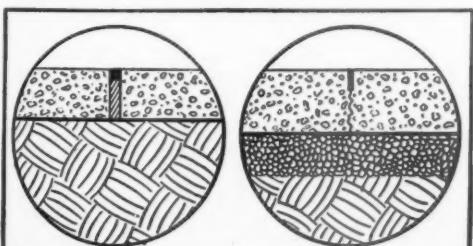
1954 CONCRETE ROADS ARE EVEN BETTER FOR THESE 3 IMPORTANT REASONS



Non-air-entrained concrete (left) and air-entrained concrete. Pin shows size of air cells.



Concrete roads used to be built on the soil (left). Now most get a granular base (right).



Old type joint (left). Narrow, sawed joint of a modern concrete pavement (right).

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and CIO glassworkers' unions together into a strong, 100,000-member organization are contemplated. But any such consolidation would require long, hard negotiating.

Currently, there are three AFL unions in the field—the Glass Bottle Blowers' Assn., the Flint Glass Workers' Union, and the Glass Cutters' League of America. CIO has one union, the Glass, Ceramic & Silica Sand Workers, outnumbered about 2-to-1 by the AFL unions.

Feeling in the industry is that getting

the three AFL unions to join forces would be more difficult than uniting the AFL group with the CIO union.

The Glass Bottle Blowers recently negotiated a 5¢ pay hike for some 36,000 employees in the glass-container industry, effective last week. At the same time, it announced that union and employer committees are studying a guaranteed annual wage for the industry, although negotiations on a GAW issue won't be possible before early 1957, when glass-container contracts expire.

McDonald Challenge in USW

Besides steel contract negotiations, he has an uprising within his own union to think about. After a contract is signed, there may be a contest for a vice-presidency.

New pressures will push steel industry negotiations this summer into a critical test for union leadership. While bargaining between Big Steel and the CIO's United Steelworkers is contractually limited to wages, the outcome will have effects on a far broader side.

This broadening of significance is not the doing of USW Pres. David J. McDonald. Last week, McDonald repeated that the contract talks would be limited to the single issue of wages. In effect, he ruled out the possibility that he might go after the guaranteed annual wage midway in the two-year contract. He said he'll "adhere" to the contract provision for reopening on wages only.

At the same time, McDonald found the scope of the talks growing in spite of his self-imposed restrictions.

• **Challenge**—A union official is always on the spot when a settlement is about to be made. He has to secure enough of a gain to satisfy the membership. In McDonald's case, one goal will be at least to match the figure of the CIO's United Auto Workers.

McDonald's arch rival, UAW Pres. Walter Reuther, is out to win the guaranteed wage. Whether he gets it or not, the settlement terms will be in money figures, and McDonald is sure to try to match the total "package" figure.

Apart from this, McDonald must also face the first intra-union challenge to his leadership over the post of USW vice-president.

• **Crown Prince**—Last week, at USW's executive board meeting in Washington, McDonald chose his assistant, Howard Hague, to fill the post. This stirred up opposition. The anti-McDonald forces countered with a strong candidate for a special election to come after the contract signing.

Unless Hague withdraws (a rumored possibility as a McDonald peace move)

his opponent will be Joseph Molony, USW's New York state district director. Molony first clashed with McDonald two years ago over handling of a dispute at a Dunkirk (N. Y.) plant. Since then, he has been the rallying point for McDonald's opponents.

At this point, it looks unlikely that Molony could displace McDonald's candidate. But the outcome will probably hang largely on what kind of settlement McDonald can obtain.

• **Out of Tune**—If there is a contest, it will be the first among top union officers in the unions history. In itself, this indicates some dissatisfaction, as does the executive board's split vote—reported to be 22 to 9—in favor of Hague's temporary appointment.

The board also:

- Heard an address by AFL Pres. George Meany on the benefits of the coming AFL-CIO merger (BW—Feb. 1955, p25) and union organization as a whole. This visit was unprecedented.

- Followed through on Meany's subject by unanimously approving the merger arrangement in a resolution that praised McDonald's "great persuasive powers" in helping to bring it about. McDonald also announced that his union would end its boycott of the AFL-CIO no-raiding pact.

- Issued a strong policy statement backing up its members who invoke the Fifth Amendment to avoid testifying before Congress on Communism.

- **Rivalry Goes On**—McDonald also indicated that his feud with Reuther won't be ended by achievement of the AFL-CIO merger. He asserted that the CIO industrial union department that's to be set up within the new union should be held by a full-time president. If this opinion prevails, it would rule out Reuther's election for the post, since he will retain his presidency of the United Auto Workers.



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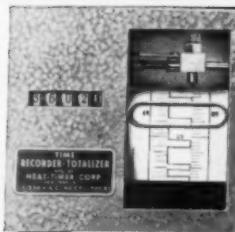
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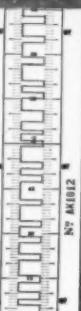
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MERGER-MINDED O. A. Knight, CIO oil union head (left), chemical union leader Elwood Swisher (right), and Walter Reuther's aide, Richard Leonard, applaud as . . .

New Union Raises Its Voice

CIO's oil and chemical unions unite. The result is a program for stepped-up bargaining and organizing.

A new Oil, Chemical & Atomic Workers International Union (CIO) came into being last week as CIO's Oil Workers International Union and Gas, Coke & Chemical Workers merged after a year's negotiations. The OC&AW, which claims 200,000 members, lost no time in flexing its muscles.

Immediately after the merger, the new CIO union:

- Announced that it would campaign "with new strength" to unionize weakly organized oil and chemical workers, with a 1-million membership goal.

- Repeated former OWIU's demand for a 5% wage increase (an average of about 11½¢ an hour) for 1954 and "additional wage increases for 1955." The union's wage policy committee said that it "wishes to make clear that any settlements made at this time [in the oil industry] should be considered settlements due in 1954." The committee made no blanket wage recommendations for chemical workers, but noted that studies would be made leading to "future coordinated oil and chemical bargaining programs."

- Announced that efforts will be made, as soon as possible, to bring about a further merger of the new OC&AW and AFL's International Chemical Workers Union, with some 70,000 members, and to bring into the indus-

try's "one big union" all scattered, small independents—starting with Central States Petroleum Union.

- At the Helm—O. A. Knight, who headed OWIU, is the first president of OC&AW. Elwood Swisher, former president of GC&CW, is a vice-president, along with B. J. Schafer, a vice-president in OWIU. Swisher is slated to become executive vice-president of the oil-chemical union.

- Preview—Attention focuses on the merger because the two CIO unions, dissimilar in many ways, were trying to accomplish what AFL and CIO must do on a bigger scale: draft a constitution reconciling many differences.

The oil and chemical delegates did this with only minor squabbles—mostly resolved in committees, and none requiring a roll-call test of strength.

- Goals—The new organization intends to step up bargaining pressure throughout the oil industry immediately—backing up with strike threats the wage demands made by OWIU nearly a year ago, and accompanied then by a no-strike pledge that has since been withdrawn (BW-Dec. 4 '54, p125). Several major oil companies last week offered 4% raises (about 10¢ an hour) to independent unionists.

At the time, Knight said the OC&AW should view the offer to the

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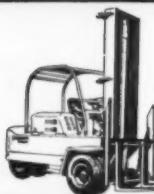
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independents as an attempt to "counteract the increasing unity" of unions.

• **Long-Term Plan**—In time, under the influence of the consolidation, bargaining policies of both oil and chemical unions can be expected to shift. Studies of "orderly, systematic and simple... job classifications and rates" will be started immediately in both industries. They will be a bargaining objective, perhaps in 1956.

First organizing—strongly backed by CIO manpower and money—will be directed against refineries and chemical plants with independent unions or no unions. A key test involves an independent union in Standard of Indiana's Whiting (Ind.) plant; if OC&AW wins there, quick steps may be taken against other CSPU independents.

Later, probably in 1956, all-out organizing drives will be launched to woo oil production workers (the union's membership in oil is mostly from refinery and pipeline workers) and in atomic plants.

LABOR BRIEFS

February raises checked by the National Foremen's Institute, a management information service, averaged 5.9¢ an hour. Most of the increases were in a 5¢ to 8¢ range—with 5¢ predominating.

In Toledo, a new fair-employment-practices ordinance, effective this month, bars job discrimination—because of race, color, or creed—by employers of 12 or more persons. Violators may be fined.

Southern organizing, high on the agenda of the merging AFL-CIO, is already being stepped up. CIO has assigned 28 organizers to work with lumber, furniture, and paper unions.

Welfare fund laws are now before legislatures of two more states—California and Connecticut (BW-Mar. 5'55, p123).

TVA wage-setting has received new support from the Dept. of Labor, which rejected a protest by Kentucky contractors against TVA-set rates (BW-Jan. 29'55, p124). The contractors wanted TVA limited to rates set under the Bacon-Davis Act.

Fishermen employed by the Birds Eye Div. of General Foods Corp. have agreed on a new pay plan for operating in the New England area. In the future, they'll be paid \$270 a trip plus a 1¢-a-lb. bonus for all catches of ocean perch over 100,000 lb. In the past, crew members shared the proceeds from 60% of the catch, with a guaranteed \$56 to \$72 minimum for an eight-day trip.



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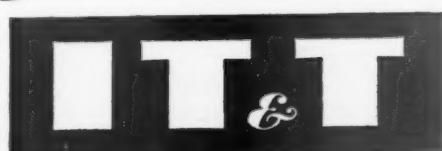
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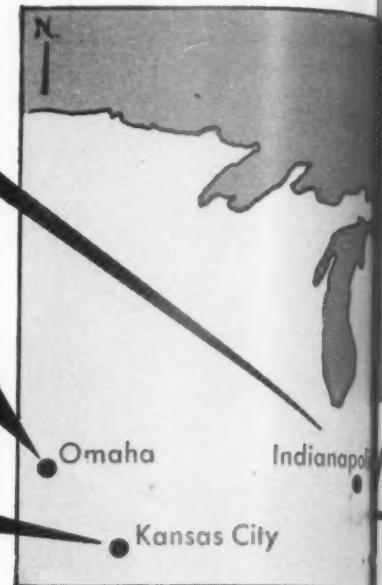
Rest-All Aluminum Posture Swivel and Straight Chairs are first choice of prominent office and institutional users the nation over. Investigate the greater returns on a Rest-All seating investment. Write for complete details.



CBS switched from independent WFBM-TV to independent WISH-TV, because WFBM-TV refused too many network shows.

CBS tied up with Meredith WOW-TV; dropped independent KMTV.

CBS switched from independent KMBC-TV to another Meredith station, KCMO-TV.



TV: The Scramble for

The two big networks, Columbia Broadcasting System and National Broadcasting Co., are in a hectic scramble for television stations.

They're not looking for stations to buy for themselves. The limit on the number of stations any one owner can have—five VHF and two UHF—remains despite the recent decision of the U.S. Court of Appeals (BW-Mar. 5'55,p26).

What the networks are scrambling for is affiliates, the best affiliates they can pick up in each market. All television stations are not equal. There are weak stations and strong stations, UHF stations and VHF stations, stations that will cooperate with the nets and those that won't. As Frank Stanton, president of CBS, put it last week, "We want to get the best ball club."

This drive is disturbing the whole broadcasting industry and is even having its effect in Washington. A lot of congressmen lend a sympathetic ear to the complaints of independent station operators who feel that they have been pushed around by the nets.

The kind of thing that is going on can be grasped from the map above. In some cases the nets have bought

new stations of their own, to fill up their quotas, as in the case of NBC in Hartford, Conn. (map). This made NBC's nearby affiliate in New Haven mad. But for the most part the pulling and hauling has taken the form of dropping an affiliate for another more desirable station.

- **Like Radio**—The present scramble resembles a similar one in radio years ago, when NBC put together a network of first-rate stations. This gave NBC a lead over CBS that the latter didn't erase until a very few years ago.

- **Shopping Around**—Today's shake-up in the industry goes back to the famous "freeze," the three-and-a-half-year period when the Federal Communications Commission stopped all licensing of new stations while it ironed out the technical problems that plagued the new medium. The full effects of lifting the freeze three years ago are just now beginning to be felt. Where there were only one or two stations in many major markets, there are now several.

This makes it possible for the networks to shop around and find new affiliates to replace the ones they have been dissatisfied with.

CBS did this in Indianapolis, where

Tug of War

better coverage in the fattest markets.



© BUSINESS WEEK

NBC is buying new station, WKNB-TV.

WHNC-TV, NBC affiliate, protests potential competition from NBC's new Hartford station.

NBC may get Westinghouse chain's WPTZ in return for...

Granting NBC affiliation to Westinghouse's new KDKA-TV.

Westinghouse may also pick up NBC-owned WNBK.

A Simple (and revealing) Freight Story



The map indicates the Rock Island "Field of operations." Rocket Freights do most of the hauling. To move freight into and out of this rich territory insist on Rock Island service. It should save you time—it might save you embarrassment—it could save you money.

See your Rock Island representative for up-to-the-minute freight information.



Rock Island Lines

THE ROAD OF PLANNED PROGRESS

for Affiliates Gets Hot

to fill up of NBC his made New Haven the pull the form another

scramble radio years under a net. This gave the latter years ago. shake-up the famous year period communications bring of new technical medium. The freeze beginning only one markets.

the net find new they have is, where

Stanton, speaking of another recent switch, makes this complaint about the station that CBS bounced: "It wouldn't even clear for the Toast of the Town."

There is more switching and similar activity by CBS than by NBC. The reason is that NBC is in the stronger position as regards TV stations. Again, this goes back to the freeze, or actually to the pre-freeze era, and to CBS's sponsorship of color television. The CBS radio stations, taking a cue from the network, delayed getting into TV, holding off for color. Meanwhile, a number of NBC radio affiliates were in first.

• **Nets vs. Stations**—At best, however, relations between the networks and affiliates have always been shaky. In radio as well as TV, the big stations—not the networks themselves—have always been the moneymakers. The stations, however, don't make their money out of the network shows. These build up station prestige. The profits come from local shows, placed at higher advertising rates. This is the nub of the

conflict between stations and nets.

In order to clear time for their programs, the networks demand "option" time at set periods during the day. They have first call on this for network shows. They also try to get clearance for shows outside their option time, but this is a matter for bargaining between net and station.

In any case, the stations resent any attempt by the nets to eat further into their profitable local time. And this struggle has become increasingly sharp as the networks have extended their programming throughout more of the day.

• **Chains**—Another factor has served to disrupt further the relations between the networks and the independent stations. This is the rise of the chains, such as Storer Broadcasting Co., Meredith Publishing Co., and others. Some of these own up to the limit of stations allowed by FCC.

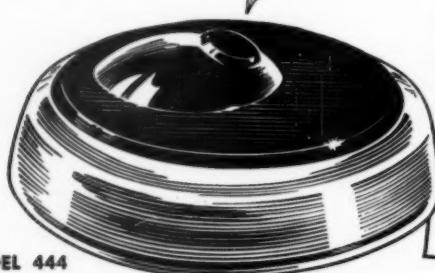
In fact, it was a chain, not a network, that challenged the FCC limit on station ownership in the case recently decided against FCC by the U. S. Court of Appeals in Washington, D. C. This case dealt with an application by Storer for a VHF license (channel 10) in Miami. Had FCC granted this, which

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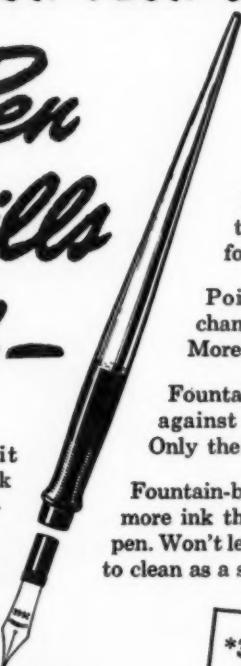
ESTERBROOK DESK SET with

*The Pen
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...and so outstanding it carries a 30-day money back guarantee! Patented ink-fountain in base automatically fills pen...keeps it ready to write a full page or more every time you take it from the socket.



MODEL 444



Finger grip never touches ink. No chance for ink to touch you.

Point instantly interchangeable and renewable. More than 30 point styles.

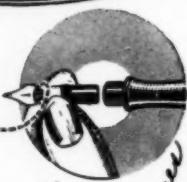
Fountain-base "ink-locked" against accidental spillage. Only the pen unlocks the ink.

Fountain-base holds 40 times more ink than ordinary fountain pen. Won't leak. Won't flood. Easy to clean as a saucer.

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Your regular dealer will be glad to let you try one of these fine Self-Filling Desk Pens on your own desk for 30 days with the understanding you can return it for a full refund if you are not completely satisfied with it.

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it did not, Storer would have acquired its sixth VHF station.

• Deal—The chains and the networks have worked out some important deals. Perhaps the most important and complicated has just been agreed to by Westinghouse Broadcasting Co. (subsidiary of Westinghouse Electric Corp.) and NBC. This deal isn't officially admitted yet by either party, but trade sources are certain of the details. This is the way it goes:

Westinghouse recently bought the Pittsburgh TV outlet of Du Mont Television Network, changed the name to KDKA-TV. (Westinghouse paid a huge \$94-million, a price that is explained by the fact that Pittsburgh is the Westinghouse home town and that there may still be a considerable wait before any more VHF licenses are granted in Pittsburgh.) For a long time the station, under Du Mont, had had a monopoly in Pittsburgh, thanks to the FCC freeze. But now there is at least one other station in town, a UHF station.

More important from Westinghouse's point of view is the fact that CBS—which hasn't yet filled its quota of owned stations—has signed a contract to buy a VHF station at nearby Steubenville, Ohio. The deal hinges on whether or not permission can be obtained to move the transmitter. If it can, CBS will blanket Pittsburgh.

• Trading—Westinghouse therefore naturally wants, and wants badly, an NBC affiliation. Even if Du Mont were not cutting back its programming, that network would hardly be strong competition with which to buck CBS. Furthermore, Westinghouse normally gravitates toward NBC. Of its three other TV stations, two (Philadelphia and Boston) have NBC affiliations.

NBC also wants something. It doesn't own its own station in Philadelphia, the nation's No. 3 market. Westinghouse has station WPTZ-TV there. The upshot has been a package agreement whereby (1) Westinghouse will get an NBC affiliation for KDKA, and (2) Westinghouse will trade off WPTZ for the NBC-owned station in Cleveland (WNBK-TV) plus some cash.

The reasoning offered for Westinghouse's part in the trade is that Cleveland is a major center of Westinghouse manufacturing activity. The argument goes that the city is more valuable to Westinghouse as a goodwill proposition than is Philadelphia.

Will the deal go through FCC? One thing might quash it. KDKA is still the only VHF station in Pittsburgh; and for that reason FCC might not allow it to tie up exclusively with any one network.

• Chain Affiliations—Whether there are over-all pacts between nets and

Even the best heavyweights hang on the ropes

New overhead crane systems are stepping up production in plant after plant. Heavier weights and odd shapes—suspended on wire ropes and slings of tough, resilient steel—are lifted as easily as you handle a knife or fork.

Hundreds of industrial lifting jobs are faster, safer and more economical than ever before, with the new methods and ingenious equipment developed by the *materials handling industry*. At the touch of skilled operators, this equipment moves tremendous tonnages.

For the lifting jobs this equipment performs, the materials handling industry relies on steel wire rope. J&L supplies this industry . . . and many others . . . with flexible, crush-resistant, durable steel wire rope in a variety of sizes and types.

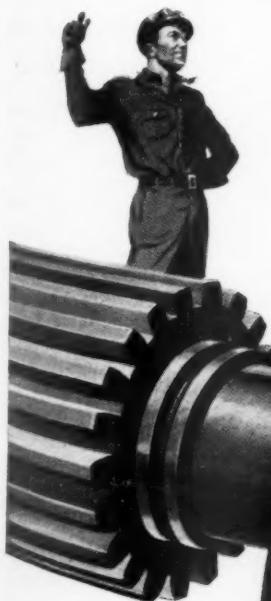


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12, 1955



COST CONTROL got you down?

Get the LIFT you need
Cut costs like others with Thilco
"Imagined" protective papers

FOR EXAMPLE: An example of an expendable Thilco paper reinforced with steel strips replaces wood boards inside doorways of railroad grain cars. Saving: 75% — plus lower installation and storage costs.



This is only one example of applied cost control by Thilco. Here are some others:

- A lighting fixture concern cuts packaging costs by replacing cartons, tags, inserts, etc., with a printed moisture-resistant bag, bearing complete product data and installation instructions. Saving: more than 50% in wrap materials alone.
- A twist drill manufacturer is using a single Print-Decorated greaseproof laminated wrap in place of more costly parchment and kraft dual wraps. Saving: 40% — plus a package that sells as it protects.

Are you paying too much for your wrapping and packaging? Can it be done better for the same or less cost?

Thilco PROTECTIVE PAPERS can help solve such problems

There's a grade or type for most any kind of protection required — including waterproofs, moisture-proofs and grease-proofs. All can also be Print-Decorated for product identity and advertising. Most are made up to 10 ft. wide without lap or seam.

Get this "Fact File"

It tells of savings made by other companies like your own. Write on your company letterhead today—and put some of these cost control ideas to work for you.



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chains is a moot point. The nets deny it. However, the important chains tend to work with one network or another.

Meredith has three CBS affiliations — in Kansas City, Omaha, and Syracuse, N. Y. It lost out in one other case: CBS awarded its Phoenix affiliation to Gene Autry's station. But in Kansas City and Omaha, Meredith last month took the CBS affiliations away from the independent stations holding them.

Storer's stations are also predominantly CBS. This chain has seven stations in all, only one of which is an NBC affiliate.

• **Power Play**—Storer is the center of a complicated power play in Miami. After failing to pick up channel 10 there, Storer (1) bought a Ft. Lauderdale UHF station that had an NBC affiliation; (2) bought the permit of a UHF station in Miami; and (3) got the Ft. Lauderdale station designated as a Miami station. This gave it the NBC affiliation in Miami.

Meanwhile, there has been some spirited bidding for one of the two VHF channels pending in Miami. One of these — channel 7 — may go to a group that includes Niles Trammell, former NBC president, as well as the Cox and Knight newspaper interests. The FCC

examiner recommended giving the channel to this particular group, but the matter is still pending because objections have been filed.

This raises an interesting question: If Trammell's group gets the nod, will it take the NBC affiliation away from Storer?

• **Washington Angles**—These chain deals have played a role in the recent Washington to-do over the role the networks play in television broadcasting.

Independent operators are naturally incensed at what is happening. They don't like to lose franchises, no matter how you look at it; the chain angle exercises them even more. These factors played a part in the recent investigations of the networks by Congress (BW-Feb. 19'55,p52).

For this reason if for no other, the networks aren't expected to capitalize on the recent U. S. Court of Appeals decision by trying to get FCC to increase its quota of TV stations to eight or more for one owner.

As it is, there may well be further hearings on television operations. And if there are, some people in the broadcasting industry frankly worry about the impact on popular and Congressional opinion. As one observer of years' standing puts it, "Some guys are making profits that are inordinate."

Who Won in 1954? Ford or Chevvy?

Both claim to have sold more cars last year than any other make. And both have figures to back their claims.

Is Ford or Chevvy the nation's top-selling car?

This week you could pick up almost any newspaper and see an ad trumpeting "More people bought Ford cars in 1954 than any other make." The same day you could see another ad boldly proclaiming "Again in 1954—for the 19th straight year—more people bought Chevrolets than any other car."

That's the confusing end to the spectacular 1954 race for sales between Ford Motor Co.'s Ford Division and General Motors' Chevrolet Division. And, to make it more confusing: Ford and Chevrolet both base their leadership claims on figures tabulated by R. L. Polk & Co., which compiles new car registrations from state licensing agencies.

Here's the explanation of the figuring that lies behind the rival companies' claims of victory:

Polk's report showed that for 1954 Chevrolet registrations totaled 1,417,453, Ford registrations 1,400,440. That's the origin of Chevrolet's claim. But in the frantic month of December, with each maker realizing the final few days might decide leadership, deal-

ers were registering cars in their own names and even—say some reports—registering motor numbers of cars they had not yet received. Probably no one will ever know for sure who sold more cars at retail (BW-Jan. 8'55,p32).

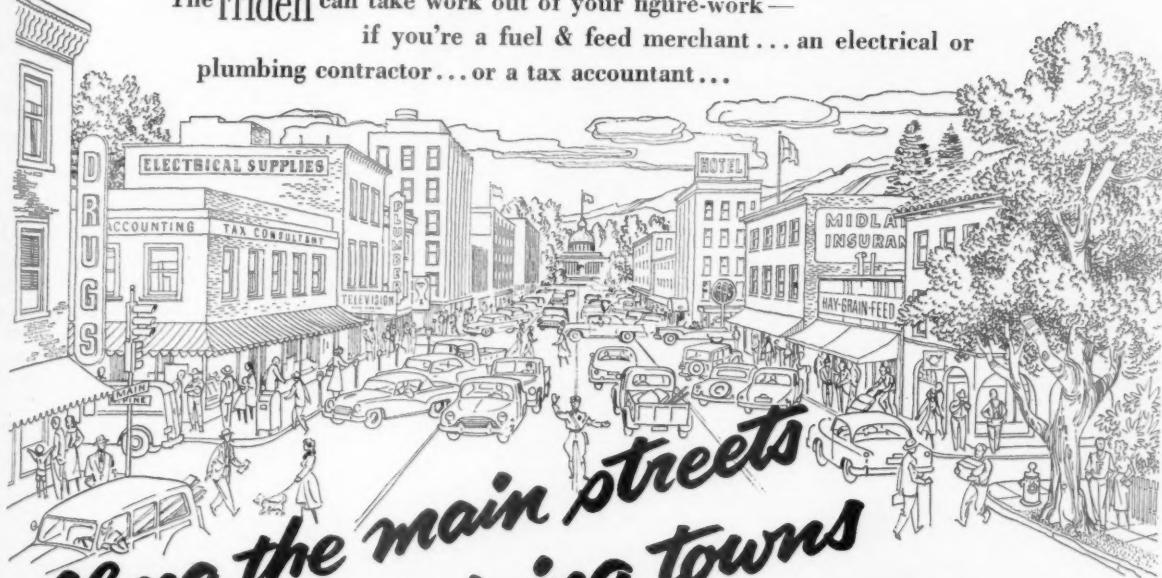
However, Ford thinks there is one way to determine the winner: deduct from the registration totals the cars registered to dealers and to the factory in December, 1954. It asked Polk to do this, with this result: Ford net registrations, 1,387,344, Chevrolet, 1,362,087. That's the basis for Ford's claims of leadership.

Polk normally separates registrations in dealers' names from total registrations, and it is believed that through most of last year it showed this separation in its regular reports. But it didn't make such a separation for December until asked to do so by the Ford Division. Then it supplied the separate figures in a "special analysis."

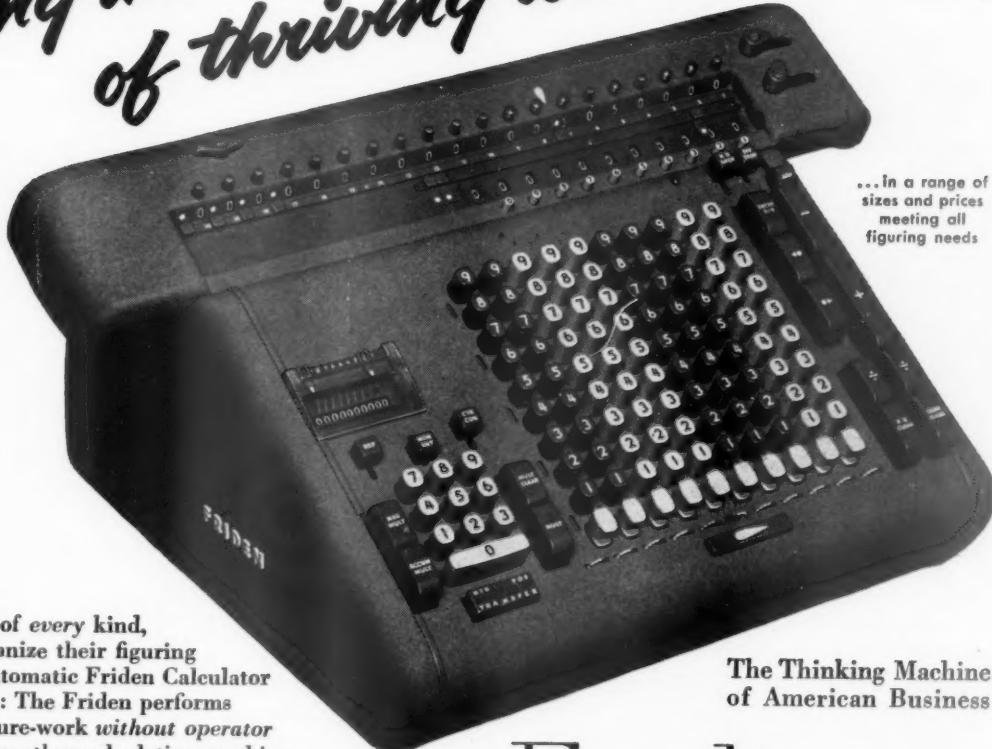
With no clear-cut victory discernible, Ford and Chevrolet are still competing as hotly as last year; and their competition is a significant factor in the present high rate of sales for all makes of cars (page 28).

The Friden can take work out of your figure-work—

if you're a fuel & feed merchant...an electrical or
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*Along the main streets
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...in a range of
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More businesses of every kind,
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ever developed. Operator decisions (thinking
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by Friden figure-thinking. Time-savings on payroll,
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The Thinking Machine
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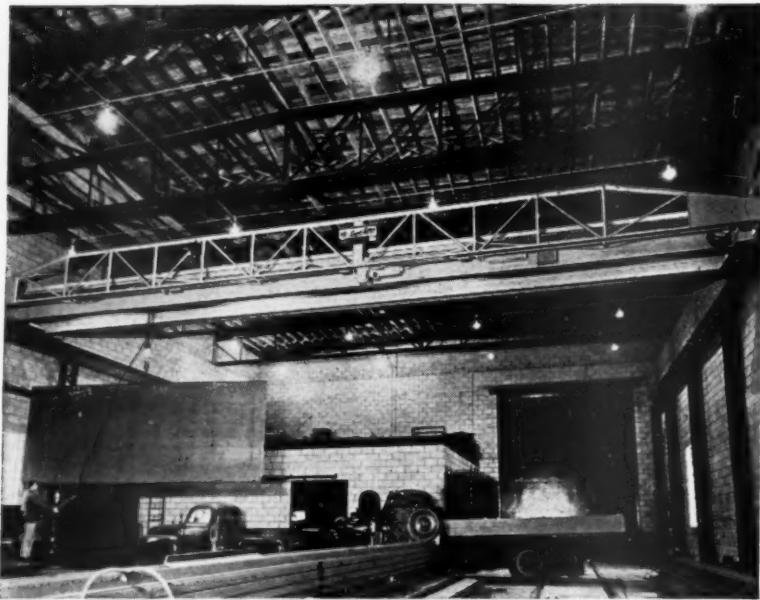
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Products of Friden...THE AUTOMATIC CALCULATOR • THE NATURAL WAY
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EASY TO SEE THE COST SAVINGS a Friden can bring your business. Ask your nearby Friden Man to show you
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SAVINGS BEGIN WITH THE PRICE OF THIS CRANE

Series "D" 'Load Lifter' Cranes are highly standardized 1 to 20-ton cranes, mass-produced to sell for far less than other cranes for average industrial service. But the saving doesn't stop there. Year-after-year operational economy is accompanied by permanently reduced load-handling costs.

Series "D" All-Electric 'Load Lifter' Cranes provide dependable service because built into them are construction, operation and maintenance features you would expect only in the most expensive heavy-duty cranes. For example, strong, rigid *three-girder* design eliminates whipping and skewing. All gearing operates in oil in sealed housings. The motor and drive shaft are permanently aligned. Ball and roller bearings assure smooth, efficient operation. Spotting is simplified by fast-acting brakes and variable speed magnetic control, operated by push buttons on floor controlled cranes, and by master switches on cage controlled cranes. From end trucks to load hook, safety devices protect man, load and crane.

It's easy to buy a Series "D" 'Load Lifter' Crane for cage or floor operation. Just get a copy of Catalog 221, then select the size and type that best meets your requirements. Write today.

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More Handicaps

General Petroleum's gas-test run is over tougher course; and entrants must have automatic drives.

Early Monday morning, cars of almost every make will begin congregating at a garage in Los Angeles. All will be contenders in General Petroleum Corp.'s annual three-day Mobilgas Economy Run. The race will be not to see who covers the 1,323 miles to Pike's Peak first, but who gets there on the least gas.

General Petroleum, western marketing affiliate of Socony-Vacuum Oil Co., decided to resume its Economy Run in 1950 because the company felt it was a good promotion piece for its Mobilgas sales. This year, General Pete has introduced a couple of new features that may give the run a lot more importance.

First, there was the need to make the results mean something to the average driver. The skilled drivers on the Economy Run were setting up some pretty fancy averages per gallon. To make the figures more believable, General Pete decided to make the course longer and tougher.

Second, in many circles the Economy Run was laughing stock because there were so many winners. There were just too many classes for the limited number of American automobiles—10 classes in 1950, 9 in 1951-52, and 7 in 1953-54. General Pete believes it has solved this problem this year by requiring all autos in the run to have automatic drives. This cuts the classes in the run to the four classes that coincide with the traditional price breakdowns in the industry—low, low-medium, upper-medium, and high price.

• More Realistic—Industry observers are watching this year's run with less tongue in cheek. They believe it may provide one of the first real tests for the automatic drive. Last year, 11 of the 20 entrants in the run were equipped with automatic drive. These cars averaged 19.79 miles per gal. over the twisting, climbing 1,335-mile route to Sun Valley. The average for all 20 cars was 21.8466 miles per gal.

• Rewards—Just what General Pete and the auto entrants get out of the run besides fun and the love of a contest is slightly intangible.

The oil company—which devotes a third of its advertising budget to plugging the results of the run and spends \$500,000 on the run itself—says it's hard to point to a bulge in sales that can be attributed directly to the Econ-

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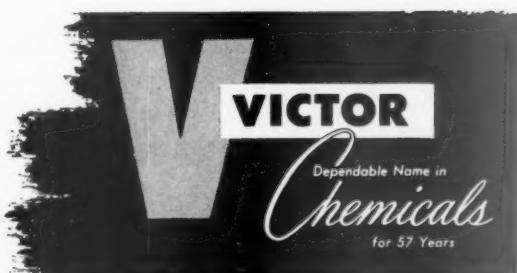
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12, 1955



The doctor's prescription! Written with confidence because the pharmaceuticals it calls for are made with amazing exactitude. And so are the Victor chemicals that play an important part in the manufacture of many pharmaceuticals. Note the products listed below. Each has been made to meet the exacting specifications of the great pharmaceutical industry.

The pharmaceutical industry is one of more than forty industries that use Victor chemicals. For helpful information on how Victor phosphates, formates and oxalates are put to work in your industry . . . write: Victor Chemical Works, 155 North Wacker Drive, Chicago 6, Illinois or, in the West, A. R. Maas Division, South Gate, California. You'll find . . . it pays to see Victor.



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PHOSPHORIC ACID • PHOSPHORUS CHLORIDES • POTASSIUM PHOSPHATES • SODIUM PHOSPHATES
SEND FOR CATALOGUE OF OTHER VICTOR CHEMICALS USED IN YOUR INDUSTRY

American Credit Insurance AND *THE CASE OF THE BULK SALE*

THIS is an illustration of how the fast working of American Credit's service can save clients much time and money, and prevent entanglements in red tape. While the case may not be of a type that has ever occurred in your own operations, it is of a sort that does happen fairly often—and so concerns all companies, large and small.

The policyholder, a chemical concern doing a gross of approximately one million dollars, was adequately covered under a general coverage policy. To all appearances, everything was proceeding normally on all of its customer accounts. In the case of one of these, however, what might have proved serious trouble was about to develop. This particular customer, a chemical wholesaler, was covered under the policy to a limit of ten thousand dollars. Actual outstanding at the time was only slightly over eight thousand—thirty-six hundred of which was in the form of a Trade Acceptance.

When the Trade Acceptance was presented for payment in the normal manner, it was dishonored. Conternation! What could have happened? The customer was a long established firm of excellent reputation. Yet . . . The account was immediately filed with American Credit as a past due item, and our Service Department went to work. Almost simultaneously, notice was received that an outside concern had purchased the customer's assets. Our attorneys conferred with attorneys for both the original owner and the purchaser. It developed that due to an oversight in the confusion of transfer, notice to the policyholder had not been given in compliance with the Bulk Sales Law.

Despite the existence of an affidavit from the seller of no indebtedness, the purchaser acknowledged his liability, and agreed to pay the entire claim at once. Collection in full was made on the seventh day after filing of the claim, and the cost to our client was—nil.

Whatever the nature or size of your own business, you will find new assurance in all dealings when you know that your accounts receivable are protected at least as well as your plant, your product inventory, and your goods in transit. For your copy of a new booklet: "Credit Insurance, Its History and Functions," write Department 42, First National Bank Building, Baltimore 2, Maryland.

American Credit Indemnity Company of New York

omy Run. But one year it estimated that its sales increased 9.8%, while the general gasoline market went up 5.4%. What's more, the company made these gains in the face of a tough price war.

Its biggest gains, however, are in public relations, publicity, and dealer morale. In fact, General Pete would probably continue the Economy Run if only for its Mobilgas dealer morale. "The Economy Run definitely adds to the over-all value of a Mobilgas franchise," says John C. Sample, vice-president.

The amount of promotion that dealers indulge in depends on who wins. General Motors never publicizes the results, and it doesn't sanction entry of its cars. But though GM is unhappy about its cars being entered, it can't stop them. Contest rules permit factories, dealers, or private citizens to enter.

• **Reaction**—Detroit on the whole is rather lukewarm to the various contests—the Mobilgas Run, Mexican Road Race, Indianapolis Memorial Day 500-mile classic, and others. The feeling among auto people can almost be typed according to the sales volume a car factory has. (This year's entries in the Economy Run include all American cars except Cadillac and Willys.)

The Big Three—General Motors, Ford, and Chrysler—have no official policies on participation or no participation in competitions. Closest thing to a policy statement is a comment from a GM spokesman that his corporation has "no enthusiasm" for contests. Although you'll find GM cars in nearly all competitions, they are entered by dealers and get no open support from the factories.

At Ford, the Ford Div. takes no part, and doesn't concede that even a first place is of any particular sales value. One executive says, "Dealers say that when you go for a prize and someone else wins it, it destroys morale. Salesmen use it as an alibi for poor sales."

When you get down to the lower-volume makes, the views change radically. Lincoln-Mercury Div. of Ford, for instance, shells out between \$150,000 and \$200,000 every year to make it possible for dealers and owners to enter Lincolns in the Mexican Road Race.

This year, after a Chrysler "300" (a limited-production model with 300 hp.) took top honors at Daytona, all Chrysler Div. sales in the surrounding states turned up. Before yearend, Chrysler will spend about \$1-million in trumpeting its victories.

But the big-volume factories think there is a risk even in winning. "Every customer thinks he can get the same kind of performance from his car," says one executive. "When he doesn't, he blames you."



*When shipments were slow, the kindly old boss
Would let the help know that this made him cross*



*But now it's made plain so that shippers don't guess
They're told with each order, "Send it RAILWAY EXPRESS!"*

The big difference is

Speed, economy, and safe, sure delivery—
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Whether your shipment is big or small,
whether it moves by rail or air,
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fast service . . . because Railway Express
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...safe, swift, sure



Need facts on buildings or sites?

Here's some plain talk on a rather tricky subject—industrial real estate. Our Industrial Location Service doesn't sell property, but we can help you with many of the problems involved in locating the right plant, or plant site, for your company. What we do is supply confidential data to suit your needs on available sites or buildings anywhere in New York State. This comprehensive information is free of charge and, even more important, free of "boosterism"!

We never try to unload real estate just because it's available. Businessmen simply don't go for that kind of promotion. Besides, the aim of New York State's ILS is to find only the best locations for industry. We want companies who'll stay here for years to come. They'll do that only if the location is the best. That's why we supply unbiased data right from the beginning.

We aim to please: with facts

That's the kind of thinking behind the ILS information service. The way we look at it, real property is only one of many considerations. ILS experts never recommend a site without sifting and analyzing all location factors in the light of your particular requirements. And they'll never withhold unfavorable information.

Find what you want here

Let's get down to cases, and see what kind of detailed information ILS offers:

For suitable buildings, we'll give information on price and financing, describe the type and condition of the structure and explain the heating or cooling systems. You'll also learn about electric installations, sprinklers, floor-load capacities, and facilities for handling sewage and other waste. Water sources, rail sidings, loading docks—any detail you wish, plus photos and plans, can be supplied in these reports.

If no suitable building exists, we'll help you arrange to have one built to your specifications. At the same time we'll help you secure financing at an annual cost you can afford.

You'll like the way we collect this information. It's put together without divulging your identity, so there's never the danger of prices being jacked up before you're ready to make a final choice.

Other free plant-site services

Buildings or sites won't be your only concern when you're looking for a new plant location. But no matter what factors are involved, ILS can be of help. Free reports are available on transportation, markets, raw materials, labor, water, and local laws and regulations—to mention just a few.

Our booklet called "Industrial Location Services" shows how you can put this valuable plant-location data to work. To get your free copy, just drop me a card, care of the New York State Department of Commerce, Room 711, 112 State Street, Albany 7, New York.

Ronald B. Peterson
Director, Industrial Location Service

Beer Sales Down, Rivalry Up

The big brewers are redoubling their marketing campaigns, and it bodes ill for the little fellows . . . Under attack again: exclusive dealing and fair trade . . . Ohrbach's old store gets tenants . . . Safeway branches out.

Brewers are shaking up their advertising, packaging, and pricing formulas in their all-out fight for the shrinking beer market.

Last year, the big national brewers continued to take the lion's share of sales from local and regional competitors, according to the latest figures from the National Beer Wholesalers Assn. Anheuser-Busch held its lead over Jos. Schlitz, 5.8-million bbl. to 5.4-million bbl. P. Ballantine sold 3.7-million bbl., and Pabst 3.6-million. One regional brewer—Falstaff Brewing Corp. of St. Louis nosed up into the top five with 3.3-million bbl. Total sales ran around 83.3-million bbl., off about 3.2% from 1953.

Here's what some of the brewers have done on the advertising, packaging, and pricing fronts to better their competitive positions:

Sponsor sports events on television. Schlitz is getting into this field for the first time this year—it beat out other brewers in the rush to sponsor the new Kansas City Athletics' baseball games. Schlitz hopes this will help it compete with Anheuser-Busch, which owns and televises the St. Louis Cardinals ball team, and which has just signed a contract to sponsor Damon Runyan's famous sports stories.

Regional brewers are going in for sports on TV, too. Falstaff this year will increase its TV bill to pay for televising of the baseball game-of-the-week to 80 cities. Griesedieck Brothers, another St. Louis brewery, will sponsor matches between big-name bowlers starting next month. Pabst, of course, has its "Blue Ribbon" boxing matches on TV.

Shuffle prices. This is what Busch is doing with its Budweiser beer on the local St. Louis market. Last summer, Bud announced two price cuts—bringing its wholesale price down 58¢ to \$2.35 a case, on a par with local beers. It won top spot in that market in short order. Pabst met the cuts, Schlitz held its price line. Now Bud is boosting its wholesale rates by 45¢ per case, attributing the hike to increased costs. Local brewers are expected to jack their wholesale prices up about 15¢ per case. They were about to do this last summer when Budweiser slashed its rates.

Hit the market with new sizes and containers. Bud isn't giving up its newfound competition with local brews. In St. Louis and other local markets it is putting out a 7-oz. "Bud Jr.," which sells at the same price as the local 12-oz. beers. Now Bud is also trying out a 10-oz. size in some local markets—at a price that is competitive with local beers.

This way, Bud figures people will accept a few ounces less if the price is no more. Pabst and others may also try the 10-oz. size for results.

Justice Dept. is standing fast by its ban on so-called exclusive dealing contracts (BW-Dec. 4 '54, p116). In a civil antitrust case filed in Los Angeles recently, the government charged that Reddi-Wip Inc.—manufacturer of pressure-canned whipped cream—illegally requires its local processors to buy the cans, dispensing heads, and some ingredients exclusively from Reddi-Wip. The company answered that it is merely insuring product quality control, that it has always offered the product to dairies, jobbers, and retail outlets "without discrimination."

A New York group is bringing farmers' market idea downtown.

Newly organized Consolidated Marts, Inc., headed by Robert C. Finkelstein, a former retail store builder, has taken over the 14th Street location vacated by Ohrbach's last August (BW-Sep. 18 '54, p96). The space, renamed "The Fair on Union Square," will house about 200 different retailers on leases of up to five years, scaled according to location. Although no individual leases have yet been signed, some 112 firms are reported ready and waiting.

The management of this 14th Street version of a farmers' market expects a \$40-million annual volume, with about \$15-million of that from specialty foods. There will also be clothing, hardware, and miscellaneous novelties. Most of the goods are designed to appeal to impulse buying.

Management will have some control over the tenants through three merchandise managers who will supervise general



Oregon Grange Wholesale reports:

Farm Equipment Sales of \$1180 from \$4~~60~~ in Long Distance calls

Four Long Distance calls sold \$1180 worth of farm equipment for the Oregon Grange Wholesale, Portland. It also gave parts customers prompter service. All for a total of \$4.60.

These were the first calls made under a plan of following up parts orders received in the mail. Often filling of such orders had been delayed by insufficient information, which took days to obtain.

Now a call is placed to each cus-

tomer. He is thanked for his order and advised when shipment will be made. Additional information is obtained quickly. And the salesman has an opportunity to sell companion items and additional merchandise when the customer is in a buying mood.

You can put a similar plan into effect today. The only equipment required is the telephone on your desk. You, too, will find that Long Distance doesn't cost—it pays.

LONG DISTANCE RATES ARE LOW

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Cleveland to Pittsburgh60¢
Cincinnati to Evansville75¢
Des Moines to Minneapolis	...85¢
Portland, Ore. to Salt Lake City\$1.10

These are the daytime Station-to-Station rates for the first three minutes. They do not include the federal excise tax.

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selling practices. An advertising budget of \$600,000 is also planned, half of which will be used for institutional promotion, the remainder for special promotions under the "Fair" label. The management will contribute half of the total sum.

"Fair trade" has been challenged in still another state court case. A Denver judge recently held that the non-signer clause in the Colorado fair trade act goes against the state constitution. This is the clause in most state fair trade laws that binds retailers to minimum fair trade prices, whether or not they have signed contracts with manufacturers.

If this decision is upheld by the state supreme court, Colorado will become the sixth state to knock the teeth out of fair trade enforcement on the same grounds. The others are Arkansas, Florida, Georgia, Michigan, and Nebraska (BW—Feb. 19 '55, p 58).

Safeway Stores, Inc., is getting ready to branch out into enemy territory—where A&P and Kroger are pretty firmly ensconced.

The chain's expansion plans were tipped off by Secy.-Treas. Milton Selby in a talk in Kansas City. According to Selby, Safeway is preparing to reach into Connecticut, Iowa, Louisiana, Mississippi, Missouri, and southern Texas and also to expand its present operations in the Dakotas, Pennsylvania, and eastern Canada.

Selby said Safeway regards its program as one of replacement and modernization rather than expansion. The chain will continue its policy of buying land, building the store, selling the property, and taking it back on a long-term lease. Each site represents an average \$500,000 investment, Selby said.

Safeway, he said, is "not too happy" about its 1954 earnings—\$13.9-million against \$14.1-million for 1953. Most of the drop was due to the chain's battle against trading stamps. Safeway has cut prices in several areas to meet the competition of the discount stamps and has also brought suit against their use in a number of states.

Pabst Brewing Co. is moving deeper into the canned soft-drink field. A year ago it introduced Tap-a-Cola in cans through its subsidiary, Hoffman Beverage Co. On Apr. 1 it will start selling six new flavors in cans in the Midwest. The new offerings will capitalize on the company's name. They are Pabst Sparkling Beverages.

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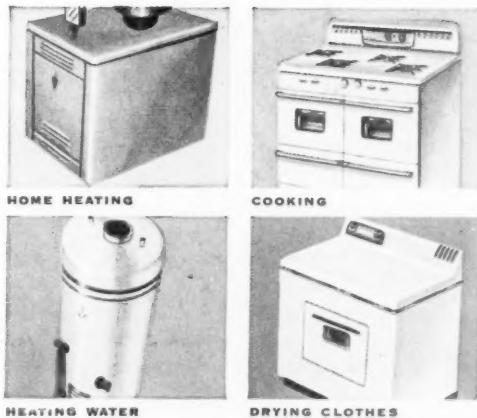
buried a million years ...now serving the nation

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Natural gas, the giant imprisoned in the earth until the pipeline unleashed its mighty power.

Now a billion and a half cubic feet of the world's finest fuel flow daily through the 2200-mile pipeline of Tennessee Gas. The nation's longest, this great artery brings natural gas from the Southwest where most of it is to the fuel-hungry East where it's needed most.

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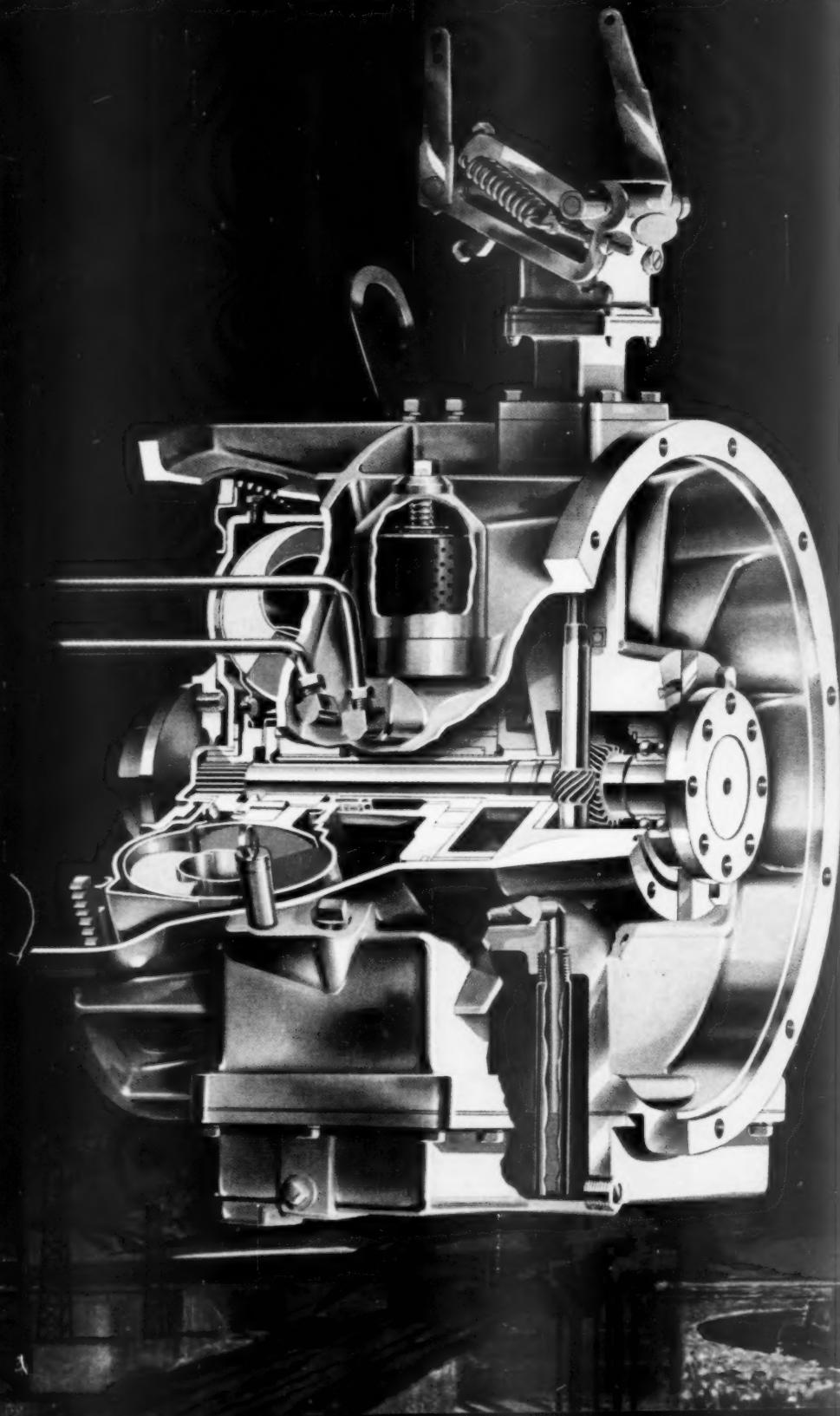


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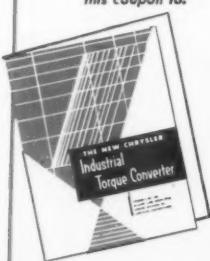
The engines powering your equipment now may lack the torque they occasionally need. Here's a way to solve that added requirement *without* installing an otherwise unnecessarily large engine. Check into these and the many other advantages of the New Chrysler Industrial Torque Converter. It's two-thirds the weight of cast iron competitive units which include provision for both transmission and power takeoff clutch. Its cost is amazingly low.

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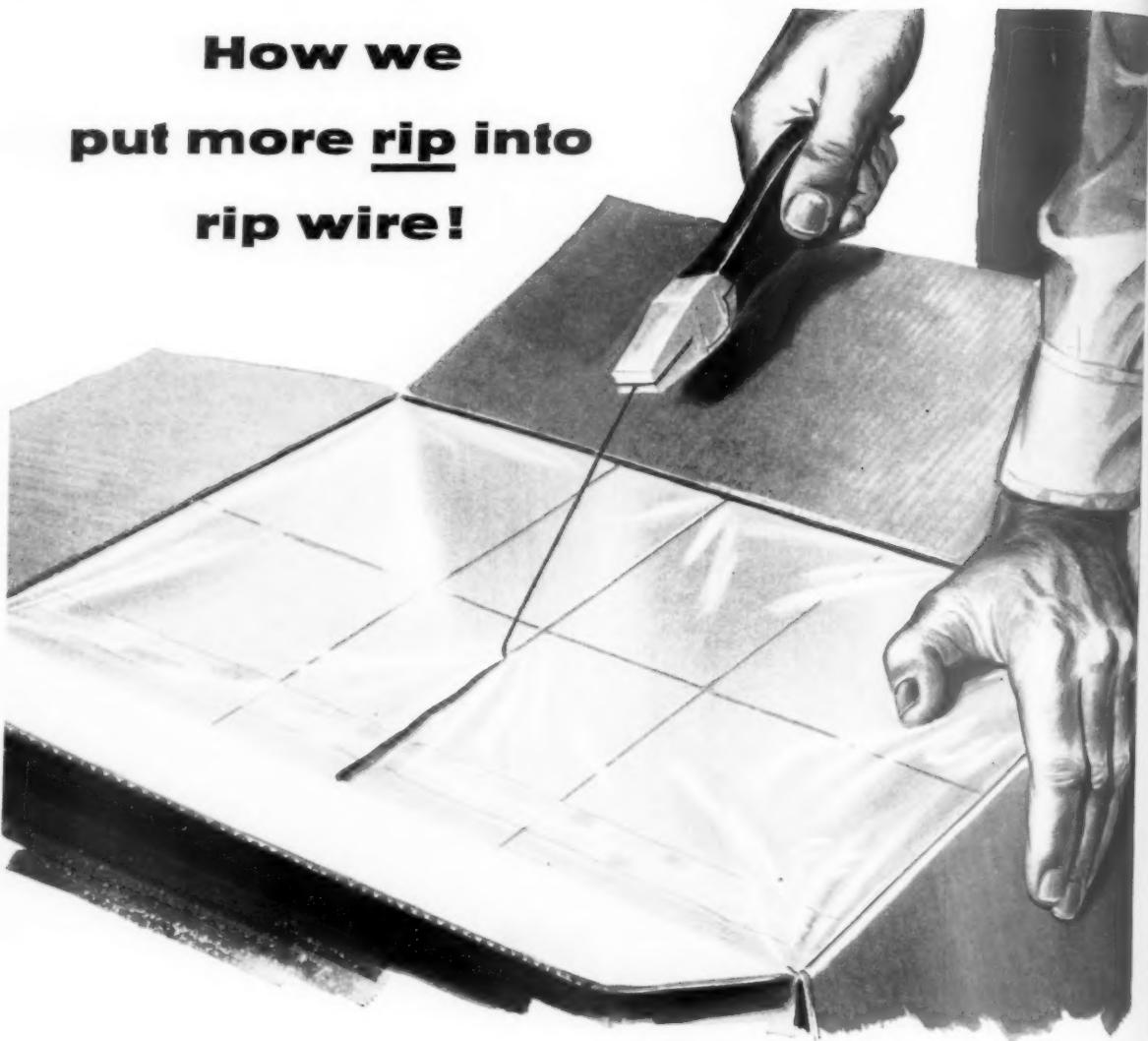
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Flat, High Carbon, Cold Rolled Spring Steel

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Special Machinery for Metal Decorating

WORCESTER WIRE WORKS DIVISION • WORCESTER, MASS.
Round and Shaped Steel Wire, Small Sizes

INTERNATIONAL OUTLOOK

BUSINESS WEEK
MAR. 12, 1955



As U.S. Far Eastern policy hardens (page 25) Japan looms larger as the decisive country in free Asia.

In terms of long-range policy, Japan occupies the same pivotal position in the Far East as Germany occupies in Europe.

If the Communists, now ardently wooing the Japanese, could produce real neutralism in Japan, the balance of power would shift disastrously against the Free World, however much of South Asia the West can hold.

The new, nationalist Japanese premier, Ichiro Hatoyama, knows his strong bargaining position. And the time for bargaining is at hand.

Secy. of State Dulles made it clear during his Asian trip that U.S. policy must prevent closer ties between Japan and the Peking-Moscow axis. That goes especially for Japanese-Chinese trade. The U.S. feels, too, that Japan must build military strength much faster than it is.

Many Japanese bridle at the U.S. position. Their nationalistic feelings are growing. Tokyo wants "normal" political relations with the East. It feels it must have more mainland trade to survive. (An unofficial Communist contact man saw Hatoyama this week to discuss Tokyo-Peking business affairs.)

Moreover, Japan won't rearm any faster without quid pro quo—and expensive ones at that—from Washington.

Figure that Hatoyama—and Japan—will stay with the Western camp, though carrying on expanding, more freewheeling relations with the East.

Figure, too, on substantial U.S. concessions to Tokyo:

- We will probably O.K.—grudgingly—some increase in Japan-China trade.
- We may force South Koreans, who expend no love on the Japanese, to buy a lot more from Japan.
- We may pay for much more of Japan's rearmament than we planned.
- We will grant important tariff concessions to Japanese goods.

In economic terms, tariff concessions could be most important. The U.S. is the one large Western market that could absorb the kind of increase in exports that Japan must have. That promises a political storm here. Many U.S. businessmen will fight any increase in imports from Japan. Tokyo-Washington trade negotiations, incidentally, begin soon.

— • —

All the ugly problems of the Middle East are reflected in the clashes at Gaza between Arabs and Israelis.

United Nations observers say that Israel is responsible for the Gaza bloodshed. No doubt the Israelis were eager to retaliate against Egyptian incursions into Israel territory. But Israel may have had a political purpose in mind as well.

Until an Arab-Israel peace is signed, the Israelis want the U.S. to abandon its policy of building up a Middle East defense pact linking Arab states. The U.S., Israel believes, should (1) force the Arabs to bury the hatchet; and (2) call off their economic blockade of Israel. And apparently Tel Aviv hopes to scare us into doing just that by adding to the tension.

It was the signing of the Iraq-Turkey alliance, and U.S. efforts to

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

MAR. 12, 1955

persuade Iran to join in, that upset Israel. This is another step, Israelis fear, toward a Western sponsored—and armed—Arab military bloc.

In spite of all this, Washington is not likely to change its course to quiet Israeli fears.

—•—

First results of Britain's money squeeze seem fairly promising. The stock market boom is damped down; instalment buying is moderating mildly. The rise in money rates has attracted funds to London, strengthening sterling. These were Chancellor Butler's immediate goals.

Sterling's recovery so far is due more to renewed confidence than to any tangible improvement in London's over-all ledger of foreign accounts (BW—Mar. 5 '55, p110).

Getting the red out of these is a slow business, involving other countries besides Britain. It's believed that 40% of the recent glut of transferable—or "cheap"—sterling came from overseas sterling countries running heavy balance of payments deficits—countries like Australia, New Zealand, and India.

Meanwhile, more London bankers are taking the view that once sterling hardens up again, the government should unpeg the official exchange rate, merge the three remaining types of sterling into a de facto convertibility for nonresidents.

Politically, the economic setback is troublesome for the Churchill government. Labor chortles that free enterprise—"Conservative freedom"—hasn't worked, that controls must be restored—by Labor, of course.

But if Butler's monetary medicine has really worked by late summer, he will emerge as a hero who dared to act quickly. Besides, Tories say, Labor is so confused that it can hardly inspire confidence among Britons.

The Labor Party is badly split over Churchill's decision to produce H-bombs and stand up to Russia. In fact, it looks as if an Aneurin Bevan, Labor's chief troublemaker, will be expelled from the party.

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Canadians are optimistic of their capital spending plans for 1955.

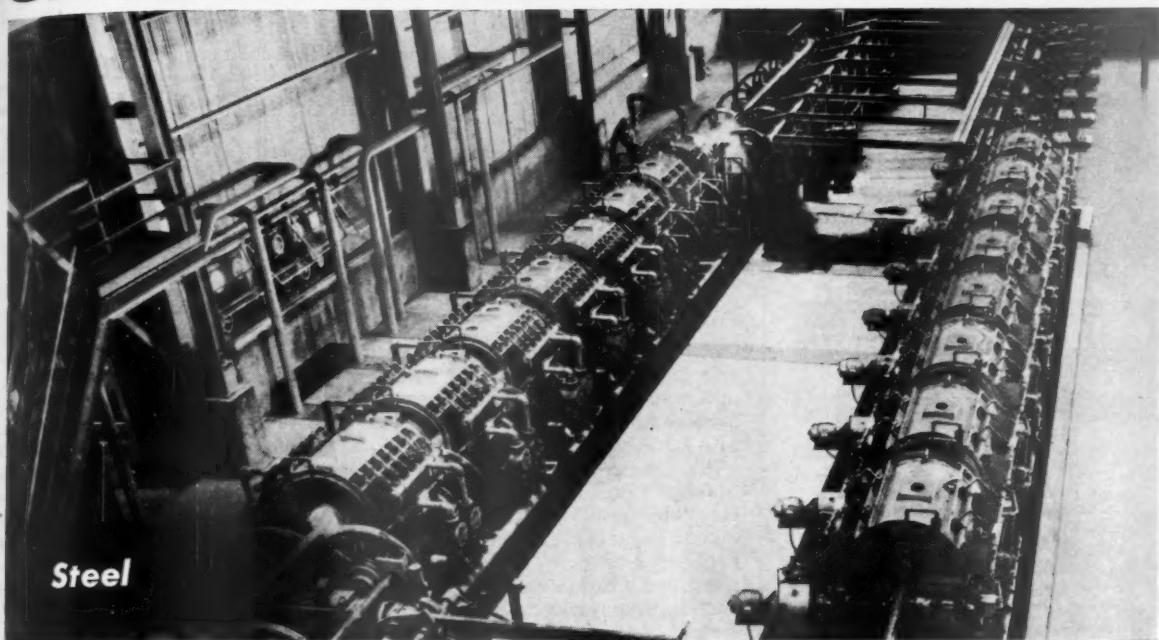
Ottawa's annual estimate of capital spending, public and private, works out to 6% higher than 1954. In fact, the \$5.8-billion figure is just a hair short of the all-time record in 1953, when Canadians plowed 24% of their national product into new machinery and new construction.

Construction—housing, industrial buildings, engineering projects—is the strong point for 1955, with spending targets 10% above last year. (The construction industry itself, however, will spend a good deal less on new equipment this year.)

Over-all, industrial spending targets on machinery and plant are lower by 3%, but most of that reflects the railroad's reduced need for rolling stocks. Demand for many other types of industrial equipment seems equal to, or above, 1954 levels.

Capital spending in Canada last year fell 6% below the Ottawa estimates. That could happen again. But Canadians feel that big factors in last year's shortfall—bad weather, crop failures, labor troubles, recession fears—arent around in 1955.

CARBON STEEL=ALLOY STEEL

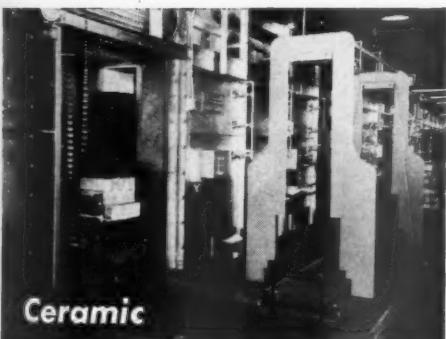


CARBON STEEL EQUALS ALLOY STEEL in strength properties when seamless steel pipe is uniformly hardened and tempered in this continuous, completely automatic line of gas-fired Gradiation furnaces . . . pipe is straight and scale-free.

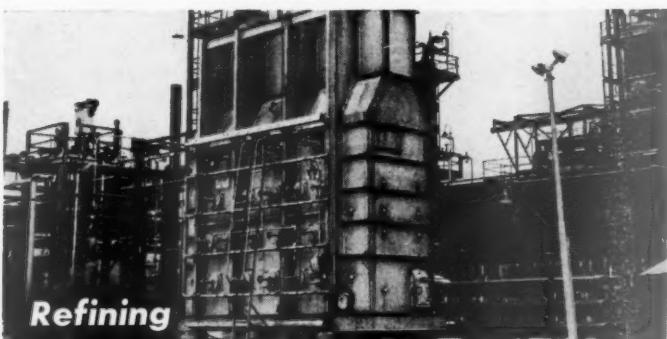
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BUSINESS ABROAD

How to Handle Asian Aid

● It's a question that is causing a lively argument in Washington.

● But one thing is fairly certain: Aid in the Orient will be nothing like the Marshall Plan in Europe.

In three or four weeks, Pres. Eisenhower will send Congress a new Asian aid program—one that's meant to back up the tough Asian defense policy that Secy. of State Dulles laid down at the SEATO meeting in Bangkok (page 25).

This new Asian program is no second Marshall Plan. Washington is taking a very different tack in meeting the Communist threat in Asia today than it took in Europe seven or eight years ago, when that area was immediately threatened by Communist expansion. In Asia, we are putting military strength first and backing it up with a cautious economic effort. In Europe, massive economic aid came first, military support second.

● **Outline**—Details of the new program haven't all been hammered out yet. But the main outline has been agreed on, including expenditures for the first year. From this, you can see how sharply Asian aid is to differ from the economic assistance we gave Europe:

Cost. Appropriations for the first year of the Marshall Plan totaled \$5-billion, but Congress will be asked to bring total Asian economic aid for fiscal 1956 up to about \$1.2-billion. That compares with \$800-million in fiscal 1955. Actual spending probably won't rise by more than \$100-million over this year.

Form. Under the new program, the preferred method of financing will be long-term, easy-payment loans—say 40 years at less than 3%, which will be repayable in local currency. Grant aid, which constituted the bulk of our assistance to Europe, will be used only where a loan would impair the future credit standing of the recipient. Technical aid will stay about where it is.

Administration. A special agency, the Economic Cooperation Administration, was created to handle the Marshall Plan. (Later, it became the Mutual Security Administration and then the Foreign Operations Administration.) No definite decision has been reached yet on what agency is to handle the new program. But it looks as if Asian aid, along with other economic aid, will be turned over to the State Dept., and FOA will fold up.

Organization abroad. There is to be

no counterpart in Asia of the Organization for European Economic Cooperation. Aid will be handled largely on a bilateral basis. The one real concession to regionalism will be a permanent regional development fund of about \$200 million, to be used to finance development projects involving two or more Asian countries, to finance the export of capital goods from Japan to Southeast Asia, and to finance a strengthened secretariat for the existing Colombo Plan Organization.

● **The Making**—This program is the product of many months of work in Washington—and many months of interagency squabbling. It's a compromise between the ambitious Marshall Plan type of program, which FOA Administrator Harold Stassen started to promote last fall, and the determination of Treasury Secy. George Humphrey to reduce economic aid to a rock-bottom minimum.

It's a compromise, too, with the political and economic realities in Asia. In the case of Europe, we had an economic base, comparable with our own, to work on; our main job was helping to finance reconstruction. In Asia today, except for Japan, we are starting from scratch with countries that have hardly started their industrial development. There is a growing feeling among economic experts, both in and out of Washington, that this development must come largely from within and therefore can't be helped much by large infusions of foreign grants.

Then there is the political instability of the free Asian governments and their inability to handle aid in the way Western Europe's governments could. On top of that there has been apathy on the part of the Asians toward the program ever since FOA Administrator Harold Stassen first started pushing it—one of the things, incidentally, which has weakened Stassen's position in the Washington feuding.

● **Elements**—The new program doesn't satisfy most officials in FOA and many in State. They feel that the tide is running so heavily against the West in Asia that only a dramatic "new look" aid effort would have a chance. Each

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expert has his own ideas of what's needed. But three elements are common to most of their thinking: The program ought to be big enough to prove to Asia that the U.S. means business; it should be long-term, say 10 years at a minimum; and it should be aimed at tightening regional unity by funneling as much money as possible through a regional organization. Some of these officials stress the regional approach as the best means of linking Japan's industrial resources with Southeast Asia and thus stabilizing the shaky Japanese economy.

Clearly, the Administration's compromise program doesn't fit this bill. It's likely that Japan will get a larger place in the program. There is still a possibility that Eisenhower will ask Congress for some kind of vague long-term commitment. But otherwise it looks as if there are only two important questions still left open: (1) Who is to run the program in Washington; and (2) how much will Western Europe contribute?

Latin Lures for U.S. Dollars

Finding the right business opportunity among the 20 vastly different nations of Latin America isn't easy. Economists and politicians may declaim about the need for more private U.S. investment abroad, but it takes more than this sort of urging—and even the legislation that sometimes follows it—to create a southbound flow of dollars.

A private investment is created only when an individual businessman sees something that looks good, that promises a return commensurate with the risk, and moves in.

• Seeds—Last week, in New Orleans, the first Inter-American Investment Conference went beyond the stage of general talk and exhortation, and spread before U.S. business a dazzling array of specific Latin American opportunities. Sponsored by the government's International Development Advisory Board, the Latin America-minded city fathers of New Orleans, and Time-Life International, it was perhaps the largest congress of the hemisphere's businessmen in history.

Over 800 visitors, roughly half from Latin America, listened to speeches and panels discussing over-all investment problems and looked over specific business proposals. A sampling of the prospects:

A cacao plantation in Costa Rica (five farms—for \$615,000); partnership in a cement plant in Cuba; partnership in a Venezuelan wire-drawing plant

• Contenders—FOA is slated to go out of business in June, and Congress shows no inclination to lengthen its life. Many congressmen are willing to vote aid year by year, but they resent the symbol of an indefinite burden on the American taxpayer, which an independent aid agency such as FOA represents.

The Administration is split wide open on this issue. Commerce, Agriculture, Defense, and State are all anxious to get their hands on some part of the aid program. The odds now seem to favor State. If that happens, it's quite possible that Stassen will drop out of the picture along with FOA.

An effort will be made to bring the Europeans in on the program at an OEEC meeting slated for April. The Administration figures this would weaken Congressional opposition to voting more money for aid. And there is a feeling that a joint Western aid effort would help undercut Communist propaganda about "dollar imperialism" in Asia.

that wants to expand; \$500,000 and technical help for an Ecuadorian drug company; a \$10-million housing development in Nicaragua; setting up a distribution company for a Mexican manufacturer of automatic tortilla-making machines who also needs \$100,000.

No doubt some of the seeds planted at New Orleans will grow into investments of capital, machinery, ideas. The conference itself hopes to become a fixture.

• Proposals—A number of ideas for stimulating investment all around were tried out on the meeting. Some investment bankers are considering a diversified fund to attract individual investors on a share-the-risk basis. Another proposal called for the amendment of certain state laws so that insurance companies could invest more freely abroad; still another suggested that the Administration's plans for tax relief on overseas corporation earnings be expanded to include individuals. Latin Americans were urged to exert pressure on their governments to improve the climate for foreign capital.

Washington, which looks to private investment to carry the largest share of Latin American economic development, was pleased with the conference. Joseph M. Dodge, head of the President's Council on Foreign Economic Policy, suggested an Asian investment meeting along New Orleans lines, perhaps this summer on the West Coast.



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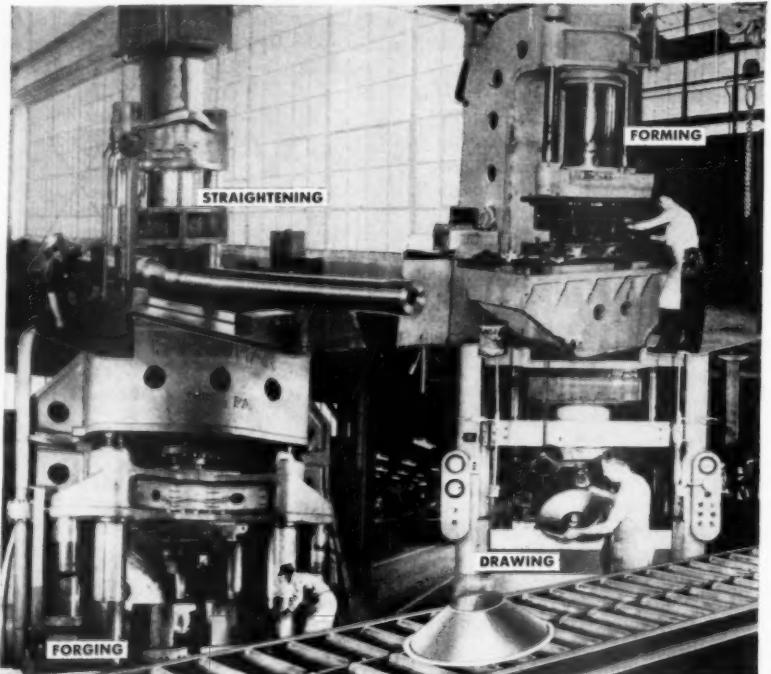
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ROBERT GORDON MENZIES

Down Under Statesman Seeks Goodwill and Aid

Australia's hale and hearty Prime Minister, Robert Gordon Menzies (picture above), came to Washington this week to polish up the edges of the Australian-U. S. alliance. That shouldn't be hard to do. Secretary Dulles found Menzies one of his strongest backers at the recent SEATO conference in Bangkok (BW-Mar. 5 '55, p107).

Menzies wants American aid—probably in the form of credits for aircraft and other military equipment—to help Australia carry out its SEATO obligations. Along with the New Zealanders, the Australians plan, as their SEATO contribution, to take over a good part of Britain's seven-year war against Malaya's Communist "bandits."

But Menzies' Liberal government has other economic problems that could come up in the Washington talks. Informed observers are predicting a \$350-million Australian balance of payments deficit during the current fiscal year, now seven months gone. Australia's central bank's overseas balances have dropped \$225-million during these months, with holdings now at about \$1-billion.

Next month the Australian government is expected to clamp a 10% cut on non-dollar imports. But the solution isn't so simple as that. Economists fear a revival of domestic inflation if imports are cut too drastically. A round of wage and salary increases makes it more critical. And repairing the damage left by a flood catastrophe in New South Wales will force more imports of steel and building materials.

Australians have some other American plans afoot besides credits. They'd like to (1) launch a campaign for more U. S. investment in Australia, (2) collect the \$46-million that's outstanding on a \$250-million World Bank development loan they received in 1951 and,

perhaps, negotiate for another \$50-million, (3) talk up a project to list some Australian industrial and mining stocks on the New York market.

But Menzies isn't bearing only a

load of economic gloom. Canberra has high hopes for increasing its exports of wool, which is now selling well. Things are also looking up for wheat exports.

Britain Plans a Latin Push

Exports Institute head urges British traders to return, vie for second place in market . . . A power plan for Africa . . . A licking for India's Reds . . . New faces in Iran?

Britain's Council of the Institute of Exports, headed by J. P. Ford, export director of the Brush engineering group, is sparking a campaign for Latin American sales.

Ford says Britain is being left behind in that market by West Germany, Italy, and France. The statistics back him up: For example, the Germans have regained their prewar position as the second largest supplier in Latin America after the U.S.

A search for the reasons behind Britain's flagging position leads way back. Part of it comes from Britain's bitter experience in Latin America. When Latin American governments, one after another, defaulted on their external indebtedness after 1900, it was London that was left holding the bag.

But worse still for Britain's trade in the area was the British traders' reaction. Once the prime movers in Latin American development, their companies became antiquated, kept alive the heritage of suspicion, and stuck to outdated selling methods.

That trend continued so strongly into the post-World War II period that last year Britain bought twice as much from Latin America as she sold there.

Ford and his associates believe the whole picture can be changed and that Latin America can take the place of some of the markets Britain has lost in the Orient. Britons must:

- Remember how much they earned in Latin American countries before the loans went bad.

- Play a role in developing local enterprises, instead of leaving that field to Americans, Germans, and Italians.

- Go into joint ventures with Latin Americans in utilities, manufacturing, and assembling.

But there's still a snag that's stalling British investment and trade in Latin America—the foreign exchange controls imposed by such countries as Brazil. There is increasing agitation in Britain to fund commercial debt over a 15-year period, thus freeing sterling for buying British goods. If that could be done, the argument goes, British exporters would soon wrest second place in the Latin-American market from the West

Germans. There's some justification for this theory in the fact that German exports to Latin America in 1954 were only slightly more than in 1953. Government credit for German exporters is also tightening.

Ford, writing in Britain's Board of Trade Journal, warns that if British exporters don't step up their Latin American trade soon, Britain faces the prospect of being frozen out of that market for the next 20 years.



The Central African Federation (Northern Rhodesia, Southern Rhodesia, and Nyasaland) government has announced it will seek funds from the World Bank for a huge hydroelectric development.

The project calls for a \$240-million development on the Zambezi River at Kariba Gorge, creating a 150-mile-long lake backing up toward Victoria Falls (see map). Sir Godfrey Huggins, Central Africa's Prime Minister, says his government can put \$20-million toward the \$150-million needed for the first stage of the development. The rest will have to come from the international lending agency.

Huggins hopes cheap hydroelectric power will give the area an opportunity

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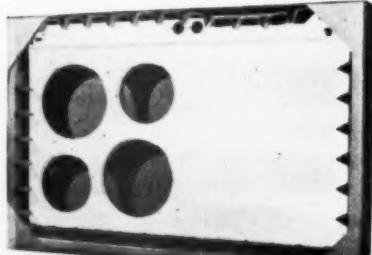
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See Clues on Page 194



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to industrialize and believes that is the only way to find employment for the rapidly increasing African population. Cheap power would also help the Rhodesian mining companies' efforts to boost African copper in the world market, where it is meeting stiff price competition despite cheaper labor costs.

Meanwhile, the strike of Negro labor in the Copper Belt (BW-Jan.8'55, p101) has ended: The African miners' Union has accepted the terms of the Chamber of Mines, and employers' association.

The miners failed to win any of their wage demands which were, in fact, an oblique attempt to break the color bar. And now relations between African workers and European miners are at a new low ebb.

American oil companies with sufficient responsibility to undertake the obligations."

Now they must get the blessing of the Iranian government, and that is considered automatic. By Apr. 1, companies that decide to go ahead must agree on how to divvy up the 5% total. The offer to buy into Iran expires Apr. 29.

The companies are: Anderson-Pritchard Oil Corp., Atlantic Refining Co., Cities Service Co., Hancock Oil Co., Pacific Western Oil Corp., Richfield Oil Corp., San Jacinto Petroleum Corp., Signal Oil & Gas Co., Sinclair Oil Corp., Standard Oil Co. (Ohio), and Tide Water Associated Oil Co.

BUSINESS ABROAD BRIEFS

Oriental oil finds: The Chinese Communists claim to have uncovered rich oil reserves in northwestern China... New oil deposits have been discovered in Assam, northeast India. According to government officials, they are capable of meeting 25% of India's petroleum requirements.

Brazil's Pres. Cafe Filho has called for an excess profits tax on earnings exceeding 20% of invested capital.

British steel experts arrived in India this week to work out proposals for a third new plant (BW-Jan.15'55,p132). Meanwhile, the Czechs announce they will bid on one of the new mills designed by Krupp-DEMAG for the Indian government.

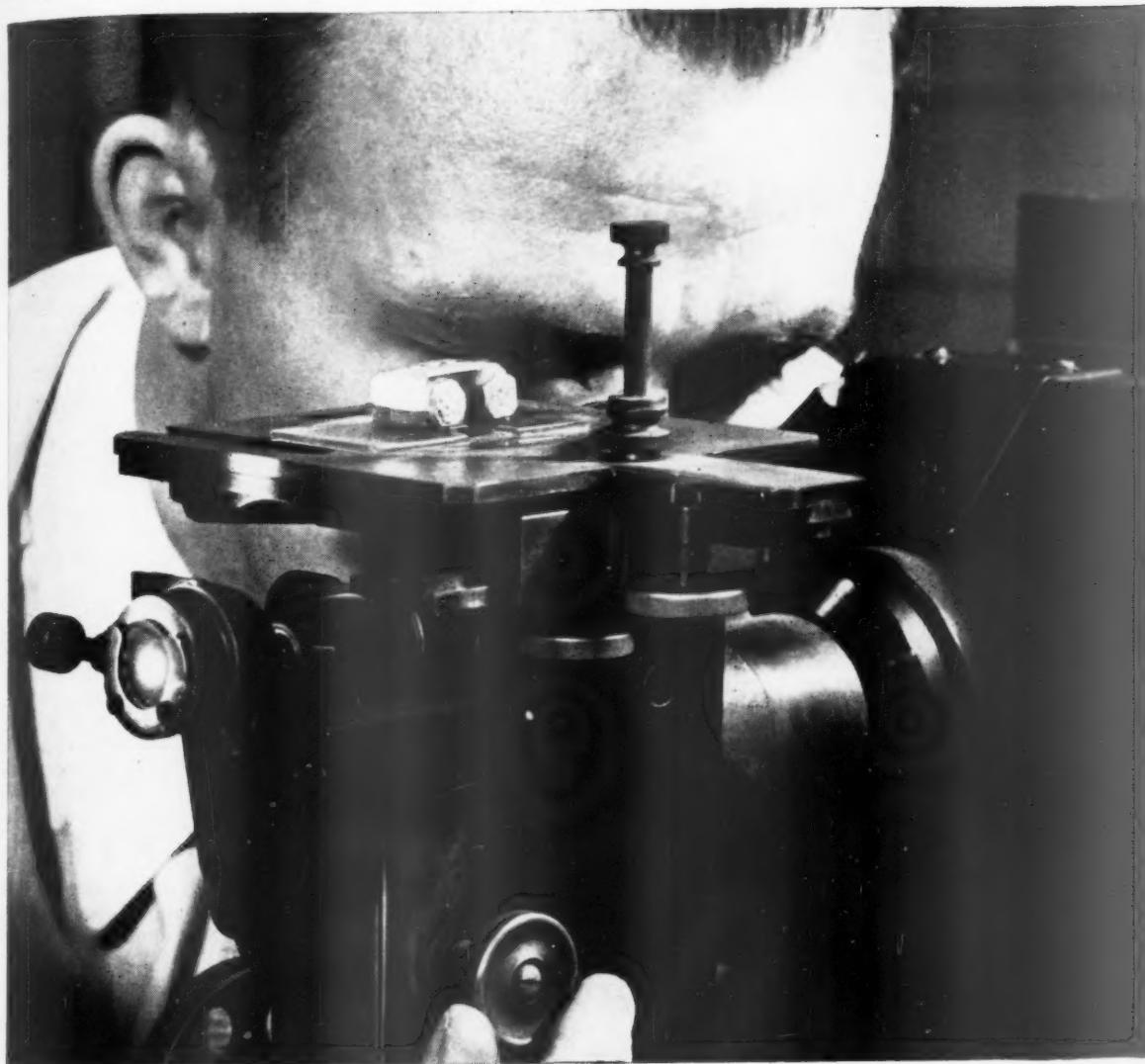
Celanese Mexicana, S. A., affiliate of the U.S. firm, will soon begin producing nylon in Mexico—the first production in that country.

Firestone Tire & Rubber Co., Koppers Co., Inc., and Brazilian interests have formed a new company to produce styrene monomer for plastics at Cubatao, the site of Brazil's new refinery.

Iran's new investment law—now in draft form before the Majlis—guarantees foreign investors the same rights as Iranians. Also, with a look over its shoulder at the Anglo-Iranian Oil Co. expropriation, the new law promises "equitable compensation" for any such moves in the future.

British General Electric Co., Ltd., no kin to the U.S. company, has a \$10.5-million electronics contract for U.S. Navy offshore procurement for NATO installations. Negotiations were carried on through Hazeltine Electronics Corp., Little Neck, N. Y.

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THE MARKETS

THE AIRCRAFT STOCKS: First Casualties of Fulbright Hearings

	1953 Low	1954-55 High	Recent Price	Percentage Maximum	Gains Now
Beech Aircraft.....	\$9.00	\$29.87	\$26.12	231.9%	190.2%
Bell Aircraft.....	8.87	38.00	29.75	328.4	235.4
Bellanca Aircraft.....	2.25	19.00	14.75	744.4	555.6
Bendix Aviation.....	50.00	117.75	111.00	135.5	122.0
Boeing Airplane.....	18.25	88.50	79.25	384.9	334.2
Chance Vought Aircraft.....	22.00*	68.00	45.87	209.1	108.5
Curtiss-Wright Corp.....	6.62	35.37	20.25	434.3	205.9
Douglas Aircraft.....	22.50	91.25	79.50	305.6	253.3
Fairchild Engine & Airplane.....	6.75	21.75	18.37	222.2	172.1
General Dynamics.....	31.00	131.00	99.37	322.6	220.5
Grumman Aircraft.....	19.37	45.75	37.75	136.2	94.9
Lockheed Aircraft.....	19.24	64.25	52.50	233.9	172.9
Glenn L. Martin.....	11.12	44.00	34.75	295.7	212.5
McDonnell Aircraft.....	16.25	42.50	37.37	161.5	130.0
North American Aviation.....	15.37	63.12	54.00	310.7	251.3
Republic Aviation.....	16.12	44.50	37.62	176.1	133.4
Rohr Aircraft.....	7.87	35.00	30.12	344.7	282.7
Ryan Aeronautical.....	12.00	50.50	41.50	320.8	245.8
Solar Aircraft.....	13.25	27.62	23.50	108.5	77.4
Sperry Corp.....	17.87	57.00	47.62	219.0	166.5
United Aircraft.....	31.87	94.00	78.50	194.9	146.3

Prices adjusted, where necessary, for stock splits.

* 1954 low. (Stock started trading May, 1954.)

Market's Pulse Is Jittery

The question that is becoming foremost in the minds of investors, speculators, Wall Street brokers, and U.S. senators is, "How much will the Fulbright study (page 170) affect the stock market?"

It is still too early for any definite answer—and it's always difficult to segregate any one factor from a multitude of others in market fluctuations. But the action of the market through midweek was providing some clues.

• **Break**—The table above reflects what has happened to the bellwether of the 17-month bull market—the aircrafts. While these shares suffered some of their losses before the hearings, the sharpest drops followed Sen. Fulbright's request to the Pentagon for information on the biggest suppliers of defense material.

Fulbright is intent on finding out just how much effect hefty defense contracts have on stock prices. In earlier questioning, he specifically mentioned General Dynamics Corp. and Douglas Aircraft Co., Inc., two of the fastest climbers. General Dynamics lost \$5 a share on Monday of this week, \$5.62 on Tuesday. Douglas, another heavy loser, dropped \$1.25 on Monday, \$3.50 on Tuesday.

Tuesday's sell-off, the sharpest since Jan. 17, involved not only the aircrafts, but a number of other companies with heavy defense contracts, such as General Motors, General Electric, Chrysler, and some steel and machine tool companies.

• **Worry**—With Pres. Eisenhower now on record for reenactment of the renegotiation law (page 32), fear of renegotiation of aircraft contracts is a main worry of both investors and speculators.

Most of the big companies racked up big earnings in 1954. Douglas, after adjustment for a 2-for-1 stock split last year, earned \$14.70 per share, compared to \$7.73 in 1953. Boeing's earnings—adjusted for its 2-for-1 1954 split—jumped from \$6.36 per share in 1953 to \$11.39 last year.

Pres. William M. Allen of Boeing, prompted by Fulbright's request for defense contract data, made this point: Boeing's net earnings as a percent of sales were only 3.58%, compared with a 6% to 7% average for manufacturing corporations generally. Taking earnings as a percent of net assets, however, Douglas bettered most corporations with a 29.9% return for 1954; Boeing's was 24.6% in 1953, and should be higher for 1954.

Wall Street Talks...

. . . about Winchell's tips, and others', too . . . what people think about stocks . . . earnings and prices.

Will Walter Winchell prove to be "fall guy" for the Fulbright hearings? Many Streeters now devoutly hope so; they're sure it would take much of the heat off Wall Street. Others say it wouldn't be quite fair; that Winchell is only one of many tipsters influencing the market. They cite as one example newspaper ads designed to whet speculative appetites by featuring, say, how a \$200 "investment" would have grown into a \$4,500 holding between 1942 and 1946, or another \$300 "buy" to \$4,500. They ask, too: How about the tardiness of so many corporate managers recently in denying wild rumors?

Market letter gleanings: "A continuation of the bullish trend now seems warranted." (Bache & Co.) . . . "Moderate easing setting in just after last week's sharp rise out of a rut does not disturb the bullish implications of that breakout . . . [but] . . . this does not appear to be a time for avid bullishness. . . ." (A. M. Kidder & Co.)

Some findings of a recent Big Board survey on the "nation's knowledge of an attitude towards common stock investments" have puzzled, hurt, and amused Streeters. The puzzle: Only 23% of the adults surveyed "could define common stock definitely"; only 10% considered commons "a way to invest some extra money." But 41% of all surveyed said "more people should own stock." The hurt: Of those knowing what commons are, less than one-fourth would invest in them. The chuckle: "Patriotism" was one of many reasons given by "upper income investors" for buying commons; quick profit hopes were a minor factor.

Earnings and dividend payments don't always dictate price trends. Take, for instance, Superior Oil of California stock. Since 1951 it zoomed from \$35 to \$1,040, is now at \$1,015. Yet per-share earnings fell from \$31.43 in 1951 to about \$28 in both fiscal 1952 and 1953, and \$24.54 in 1954; and in fiscal 1955's first quarter to \$2.43 against \$9.30 in the same 1954 period. Dividends of \$4 in 1951 dropped to \$2 in 1952, \$1 in 1953, \$2 in 1954, and a \$1 payment in January, 1955, against \$2 in January, 1954.

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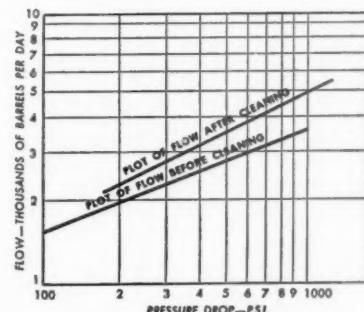
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Heating Up the Market Hearings

● The lines are drawn now. Republicans—and exchange presidents—see the boom as a mark of Eisenhower prosperity; Democrats, as speculation.

● Both sides agree we have reached no 1929 situation—yet. But Democrats liken it to 1927-28.

● New ideas are coming out of testimony—about capital gains and dividend taxation, federal regulation, promotion of wider stock ownership. More will come.

The Senate Banking & Currency Committee's "friendly study" of the stock market moves along this week pretty much on the expected course. All committee members, on both sides of the table, were cautious in their approach, determined not to upset the sensitive market.

However, on the same day that economics professor John Kenneth Galbraith of Harvard—an expert on the 1929 crash—told the committee this may be the early stages of a "boom and bust cycle," a selling wave developed and the market took its sharpest plunge since Jan. 17.

• **Opposing Views**—Galbraith's observation was the first gloomy note in the hearings, which in their early phase consisted of (1) classroom-type lectures on common stocks and operations of stock exchanges and (2) discussions of economic theory and opinion that pointed up Democratic and Republican differences.

Democrats feel that speculation and inflationary pressures are at least potentially dangerous in today's market. Republicans take the line generally that the market boom is but a reflection of Eisenhower prosperity and confidence in a prosperous future.

• **Plenty of Seats**—Under the chairmanship of Sen. J. William Fulbright of Arkansas (cover and page 184), the committee proceeded smoothly and serenely in the same cavernous hearing room where, two decades ago, a female midget climbed into J. P. Morgan's lap while he was testifying in the last big Congressional inquiry into the stock market.

• **Market Heads**—Pres. G. Keith Funston of the New York Stock Exchange and Pres. Edward T. McCormick of the American Stock Exchange (formerly the Curb) led off for the financial community. Backed by Republican committeemen, they hit hard on these points:

• Current market levels are generally realistic in relation to earnings, dividends, and prospects. This appraisal

is based not on averages but on stock-by-stock examination, recommended as the only real way in which to judge the market.

• A break could come, but the present economic situation and the composition of the market have no valid comparison with 1929.

• Elimination of double taxation on dividends and easing of the capital gains tax would remedy two minor defects in the market by (1) "unfreezing" shares that are now "locked in" and (2) encouraging corporations to issue more equity shares to raise new money.

• Present federal regulation is adequate to assure an honest market.

• **Market Critics**—After hearing Funston and McCormick, the committee turned to the market's defenders and critics. Prominent among them was critic Galbraith, author of a book on the 1929 crash that is to be published soon.

Backed by Galbraith, Democrats worked along this line:

• Another crash could come if speculation is not kept in check. Margin requirements of 100% may be in order.

• The present situation, however, bears more resemblance to the big buildup years of 1927-28 than 1929.

• The financial community should emphasize, in its public education and promotion programs, the risks of going into the market in pursuit of a quick profit.

• **Defense**—Emphasis on the public's education about "risk" is a matter of degree. Both Funston and McCormick admitted existence of hazards but said investment houses do stress them.

Typical was Funston's remark that "I do not want to have anybody get the impression that I say a break in the market cannot come or that the market will not go down, because when people start to talk that way it is not a particularly good sign."

Equally candid in more colorful language was McCormick. Asked whether listing on either the New

York or American exchanges is a hallmark of quality, McCormick said, "Let's not kid ourselves—there are dogs on both exchanges."

• **Who's to Blame?**—Wall Street experts who blamed Galbraith for the first big sell-off during the hearings found a skeptic in Winthrop H. Smith, managing partner of Merrill Lynch, Pierce, Fenner & Beane, biggest security dealer.

"Some days it sells up, some days it sells down," he said. "Sometimes we think we know why; some days we don't. This time I don't know why, but I doubt very much if it was Prof. Galbraith's testimony."

Only unexpected development in the opening phase was the committee's decision to ask the Defense Dept. for a list of the 100 leading companies with defense contracts. The aim: to determine, if possible, what effect this form of "indirect government subsidy" has had on market prices.

Public hearings will continue until at least Mar. 23.

I. Is the Market Too High?

Sen. John J. Sparkman asked Funston the multibillion-dollar question on the first day of the hearing: "Do you think the present level of stock prices is too high?"

Funston's reply was a model of caution. ". . . A year or two from now I will be able to say . . . [now] I just don't know. The most I can say is this, sir—I believe that the present market levels . . . have been created not by undue flow of borrowed money and not by manipulation, but represent the public appraisal at this time of the future value, of the future earnings and dividends."

McCormick was even more positive. "Definitely not" too high, he said, and continued:

"If you are asking me what I would do, I certainly would not buy a cross-section of this so-called average. I would select stocks that I think are good buys, and I would buy them. There are stocks right now I probably would sell in the next few months. And that's what I urge you gentlemen to look at—individual situations, not this market-level-and-average deception."

James E. Day, president of the Midwest Stock Exchange, Chicago, said it appears "very few stocks are out of line, pricewise" when analyzed on basis of book value, earnings per share, and yield.

From the Far West came Ronald E. Kaehler, president of the San Francisco Stock Exchange. His answer to the big

question was flat—"I don't know." • Unrestrained?—Galbraith would not commit himself on a yes or no basis, but he injected a note of deep restraint. He said statistics on short-term stock purchases and "market discussion" lead him to believe that speculation—"unrestrained pursuit of capital gains"—is a big factor in the market and is not a healthy sign.

"It would be a gross exaggeration to say that there has yet been any wholesale escape from reality such as occurred in 1929," Galbraith said, "but enough has happened to indicate that we haven't yet lost our considerable capacity for self-delusion."

II. 1929 and Now

Economic wounds are healed, but memories of that 1929 crash pervade the atmosphere. Sen. Mike Monroney of Oklahoma tried to clear it a little. Comparing 1929 to 1954-55, he said, is "like using the behavior of an alcoholic on a lost weekend in comparison to what a sane and sober man would do."

The stock market people nodded agreement, but the question—another crash coming?—still had to be examined. Funston and McCormick, whose exchanges together handle about 95% of the dollar volume in stock trading, said this is a clean, honest, aboveboard market. Both said they work constantly, independently of and in cooperation with the Securities & Exchange Commission, to keep it that way.

• No Comparison—Funston went to statistical tables to reinforce his argument that the national situation now and in 1929 are not parallel:

"... Those things which can be measured economically are three or four times what they [were then]—that is, gross national product, national disposable income, and so on. In terms of physical volume, the 1954 volume is twice what it was in 1929.... In terms of total profits after taxes and of total assets, corporations are twice as big.

"Now then, if you look at the stock market by comparison... prices instead of being twice or four times as much—even before you adjust for the decline in value of the dollar—are only slightly in excess of where they were in 1929. McCormick, testifying that there is no evidence of manipulation, watered sales, or pools in today's market, said: 'Let's not kid ourselves. The market in 1929 was rigged. It was not an honest market. Pools were operating.... It was up to its ears in debt.'

• More Like 1927-28—Galbraith was not optimistic, but he settled finally for likening the present situation more to the buildup of 1927-28 than to the collapse of 1929.

"I have the feeling we may be fur-

This is under no circumstances to be construed as an offering of these securities for sale, or as an offer to buy, or as a solicitation of an offer to buy, any of such securities.
The offer is made only by means of the Prospectus.

\$13,000,000

Continental Baking Company

3 1/2% Subordinated Debentures Due March 1, 1980
(Convertible until February 28, 1965)

Dated March 1, 1955

Due March 1, 1980

Price 102% plus accrued interest

Copies of the Prospectus may be obtained in any State only from such of the several Underwriters, including the undersigned, as may lawfully offer these securities in such State.

Wertheim & Co.

Lehman Brothers

Blyth & Co., Inc. The First Boston Corporation Goldman, Sachs & Co.

Lazard Frères & Co. Carl M. Loeb, Rhoades & Co.

Merrill Lynch, Pierce, Fenner & Beane Salomon Bros. & Hutzler

Union Securities Corporation White, Weld & Co.

February 24, 1955

**OVER
18 YEARS
OF ADVERTISING
LEADERSHIP...**



For more than eighteen consecutive years, leading companies in every major field have placed more pages of business advertising in *Business Week* than in any other general-business or news magazine.

In 1954, *Business Week* carried 5,469 pages of advertising—2,201 pages more than any other magazine in its field.

The reason for this consistent record of advertising leadership: *Business Week* reaches a higher concentration of management executives—at lower cost—than any other general-business or news publication.

What advantages do TAX-EXEMPT BONDS offer You?

Their merits are many, but perhaps the most important today is the opportunity to upgrade your investments, gain greater safety and quality, and still receive as much or more spendable take-home income.

For example, a tax-free yield of over 3% from the new Power Authority of the State of New York 3.20% General Revenue Bonds gives an individual investor in the \$25,000 federal tax bracket more take-home income than would a 7.3% yield from a lower grade taxable bond. It provides the \$50,000-income investor more net return than does a 12% yield from taxable securities. And today's large volume of high grade state, municipal, turnpike and other revenue issues offers a wide choice of bonds with these advantages of safety, good yield and tax relief.

Our current offering list shows many of them. Send for it without obligation, and also receive our up-to-date tax chart that helps you determine the amount of tax relief an investor in your income bracket may expect.

HALSEY, STUART & CO. INC.

CHICAGO, 123 S. LA SALLE STREET
NEW YORK, 35 WALL STREET
AND OTHER PRINCIPAL CITIES

ther along the line [of speculative boom] than Sen. Ives suggests," Galbraith remarked after the New Yorker had minimized the speculative influence in today's market. And, again, Galbraith warned: "This market could go on up due to this pursuit of capital gains . . . and there could be a collapse," but, "I am not suggesting that will happen."

From middle ground, he conceded that the current national economy is stronger than 1929's, and he recognized the effectiveness of regulatory laws. On the other hand, he saw danger in equanimity, "great speculative optimism," and the "sizable wave of mergers."

III. Credit in Marketplace

Galbraith, as a witness, was even stronger than Sen. Paul H. Douglas of Illinois, as examiner, on the subject of credit's impact in pushing up prices. Douglas took Funston and McCormick over the hurdles on this, and they resisted his suggestion that margin trading was a major factor in boom levels.

Galbraith took the opposite tack. "If there is a resumption of the upward movement of the past year in the weeks or months ahead, the Federal Reserve should be pressured to put trading requirements on a cash basis by raising margin requirements to 100%," he said.

Beyond that, he said, the government should make its position clear in every possible way, and "If speculative tendencies persist, more drastic measures invoking the tax power should be contemplated."

• **How Many Deals?**—Funston and McCormick came armed with figures that, on the surface, indicate only about 2% of the total market value of listed stocks was bought on margin.

"But since the market is a thin market—since only a small proportion of stocks held are actually traded in—this would be a larger value of stocks traded in," Douglas countered.

Funston agreed when Douglas cited the New York Stock Exchange survey of public transactions (covering two days last year), showing about 33% of total volume and 31% of total number of transactions were accounted for by margin trading.

• **How Big a Factor?**—The senator wondered if the Federal Reserve Board should not put on the brakes by raising margin requirements, already upped last Jan. 4 from 50% to 60%. Funston stuck by his position that credit buying of stocks is not a principal factor in the current bull market and, anyway, "I don't think margins can . . . influence the market level."

McCormick guessed that American Stock Exchange transactions based on margin were at about the same ratio as

the Big Board's, and he estimated the over-all credit injection at about \$3 billion—"taken against over-all volume . . . not enough to be a major factor in pushing the market up."

IV. Why the Bull Market?

In trying to explain the spiral of the market in the past 18 months, the senators found room for some good-humored political byplay. Republican Homer Capehart of Indiana said answers to about 900 questionnaires returned to the committee have a pretty simple theme—"confidence in Eisenhower and the Administration." Chmn. Fulbright drawled that he reckoned what Capehart really meant was "confidence that Mr. Eisenhower would give big business every break."

• **Split?**—Sen. Wayne Morse, the renegade Oregon Republican who turned Democrat after one session as an independent, made a darker reckoning of promotional and advertising efforts both by the New York Stock Exchange and by the securities industry generally.

He wondered if this might be politically motivated, "in that if millions of Americans own a few dollars of stocks they might not be so enthusiastic about a political program that would seek to impose legislative restrictions on business abuses."

• **Real Reasons**—McCormick, a registered Democrat who served on SEC by appointment of Harry S. Truman, and Funston, who did not state his political faith, agreed on these reasons for the market boom:

- Readily available money and credit for business.
- Improved climate—new depreciation policies, elimination of the excess profits tax, a slight easing up in double taxation of dividends.

- Growing confidence in future national growth and prosperity.

- End of fighting in Korea and Indo China, plus a brightening outlook for Western Europe.

- Startling technological advances, including adaption of the atom to peaceful purposes.

V. What About Taxes?

Funston and McCormick plugged hard for Congressional action to ease up on the capital gains tax. They said this would "unfreeze" equity shares, and put supply and demand for stocks in better balance, ease pressures on price.

Funston said many shareholders now "frozen in" the market would sell their securities more readily if the capital gains rate were pared from 25% to 12½% and if they were allowed to take their profits under the more favorable tax rate after holding securities

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Fulbright wondered if that would not stimulate an even bigger rush into the market by short-term speculators. And Morse wondered why stock market profits, no matter when taken, shouldn't be treated as straight income. McCormick and Funston thought double taxation of dividends should be eliminated entirely in order to encourage issuance of new equity shares. For every \$1 in new equity financing, corporations now raise \$3.50 by credit, the witnesses agreed, largely because bond interest is cheaper than dividends and double taxation of dividends.

Galbraith called himself an "amiable skeptic" about the exchange officials' capital gains tax proposition.

"One of the most engaging aspects of economics is the tendency for proposals for economic reform to culminate in suggestions for tax reduction," he observed of the field generally.

Of capital gains specifically, he said, "Repeal, it is presumed, would bring more sellers. It would as plausibly, and perhaps more plausibly, bring more buyers. It is interesting to recall that early in 1929 there were suggestions that the country was running out of common stocks. They were not locked in; in those more unsophisticated days, it was merely said that there weren't enough to go around. In October [1929] this doctrine was proved in error. Stocks became suddenly, miraculously, and disastrously more abundant."

VI. For the Record

Galbraith helped when Fulbright, in the fourth day of the hearing, publicly acknowledged that the committee is on a spot. "We know a lot of people will blame us . . . if the market falls out of bed" soon or even in the next six months, Fulbright said.

Not rightly so, said Galbraith, adding that a Congressional study of the stock market in 1928 might have "arrested the boom" and averted collapse. At any rate, Galbraith went on, "A determined government, at any time in 1928, could have stopped the boom."

• Exchange's Campaign—Fulbright and Monroney both spent considerable time on ramifications of the New York Stock Exchange's \$1-million promotion and advertising campaign, to interest "new people" in owning shares. Fulbright thought this was beyond the exchange's function of providing a mere marketplace; Monroney thought it was ill-timed as long as there's a scarcity of shares, and corporations are relying more on bonds than stocks to raise new financing (3.5 to 1 is the ratio Funston cited).

Galbraith agreed with both. In the "years of doldrum"—the 1930s—the

This announcement is neither an offer to sell nor a solicitation of any offer to buy securities.
The offering is made only by means of the Prospectus, which describes
the securities and the business of the Company.

\$25,000,000

The May Department Stores Company

3 1/4% Sinking Fund Debentures

Due March 1, 1980

Price 100%

(and accrued interest from March 1, 1955)

Upon request, a copy of the Prospectus may be obtained within any State
from any Underwriter who may regularly distribute it within such State.

Goldman, Sachs & Co.

Lehman Brothers

March 1, 1955.

National
TRUCK LEASING
EXPERIENCE

**IS AVAILABLE TO
YOU!**

locally!

Truck users! You will be pleased with our all-service truckleasing.

America's leading firms utilize the efficiency of our specialized facilities. Forget your problems of replacement, breakdowns, repairs, insurance, licenses, paper-work, road calls, tied-up capital and extras. Know your costs in advance. Let us engineer your fleet to fit your exact needs.

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National
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SYSTEM

23 EAST JACKSON BOULEVARD CHICAGO 4

Look up National Truck Leasing System in your local phone book, or write for brochure and listing of NTLS companies. Dept. B-3

**LEASE
your trucks**

This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these Debentures. The offer is made only by the Prospectus.

\$250,000,000

General Motors Acceptance Corporation DEBENTURES

\$50,000,000 Five-Year 3% Debentures Due 1960

Dated March 15, 1955

Due April 1, 1960

Interest payable October 1, 1955 and each April 1 and October 1 thereafter

\$200,000,000 Seventeen-Year 3½% Debentures Due 1972

Dated March 15, 1955

Due March 15, 1972

Interest payable March 15 and September 15

**Price For Both Maturities 100%
and Accrued Interest**

Copies of the Prospectus may be obtained from only such of the undersigned as may legally offer these Debentures in compliance with the securities laws of the respective States.

MORGAN STANLEY & CO.

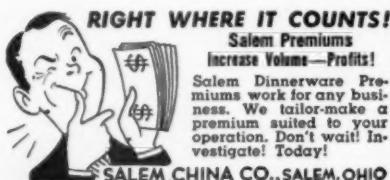
DILLON, READ & CO. INC. THE FIRST BOSTON CORPORATION KUHN, LOEB & CO.
BLYTH & CO., INC. DREXEL & CO. EASTMAN, DILLON & CO.
GLORE, FORGAN & CO. GOLDMAN, SACHS & CO. HARRIMAN RIPLEY & CO.
KIDDER, PEABODY & CO. LAZARD FRERES & CO. LEHMAN BROTHERS
MERRILL LYNCH, PIERCE, FENNER & BEANE SALOMON BROS. & HUTZLER
SMITH, BARNEY & CO. STONE & WEBSTER SECURITIES CORPORATION
UNION SECURITIES CORPORATION WHITE, WELD & CO.

March 8, 1955.

MATERIALS HANDLING COST REDUCTION

A preliminary survey without charge will determine the potential savings and the cost.

Gemar Associates
CONSULTING MATERIALS HANDLING ENGINEERS
Greenwich, Connecticut
Over 20 years experience



Belmont Plaza
in NEW YORK
Lexington Avenue of 59th Street
In the heart of New York's fashionable East Side, a few steps from Grand Central, theatres, offices and entertainment. Attractive, modern rooms, all with bath. Fine restaurants. Sensible rates.



campaign would have been proper, Galbraith said. Now, if there's to be such a program, he said, its impact should be shifted—"the much greater need is for education about the danger in unrestrained pursuit" of quick profits.

VII. What About Averages?

Value, and public understanding of the various stock market indexes—Dow-Jones, Standard & Poor's, etc.—was a lively topic.

It started when McCormick was in the witness chair and was asked by Fulbright to explain the Dow-Jones index figure of \$28 per share "earnings" for industrial companies last year. Fulbright said he felt it was misleading.

McCormick stepped aside to seek some expert advice, and Morton M. Adler, of Rye, N. Y., a spectator who identified himself as "an amateur investor," slipped into the witness seat.

"Those figures are based upon the adjusted Dow-Jones average of the original securities . . . [in existence] when the averages were first made," Adler said. After a brief hiatus, McCormick returned to elaborate further on Adler's explanation. In essence, McCormick's explanation was that the index averages do not reflect splits of stocks since the index was set up.

McCormick said the averages don't mislead experts and he doubts if the average public buyer is much influenced by them, although a novice "could be misled."

• For the Wastebasket—At any rate, McCormick said, he places "absolutely no weight" on an average and "as far as I am concerned, I throw it in the wastebasket when I see it."

Kaehler said the best way to get a good picture of the market is to see which stocks are up, which are down and which stand still on a given day. For example, he said, on Mar. 3—first day of the hearings—1,243 stocks were traded on the New York Stock Exchange; 533 were up, 446 were down, and 264 were unchanged. On Mar. 4, 1,229 issues were traded, 520 advanced, 447 were down and 262 were unchanged. Both days the number down or unchanged was bigger than the gainers, Kaehler said, but the Dow-Jones averages were up each time.

VIII. Tipsters vs. the Market

Walter Winchell's radio-TV stock counseling was condemned by Fulbright, Sen. Prescott Bush of Connecticut, and others.

Most questioning concerned Winchell's much publicized recent tip, in a Sunday night show, that Panhandle Oil—listed on McCormick's American Exchange—is a "good thing."

The tip on Panhandle was that a stock

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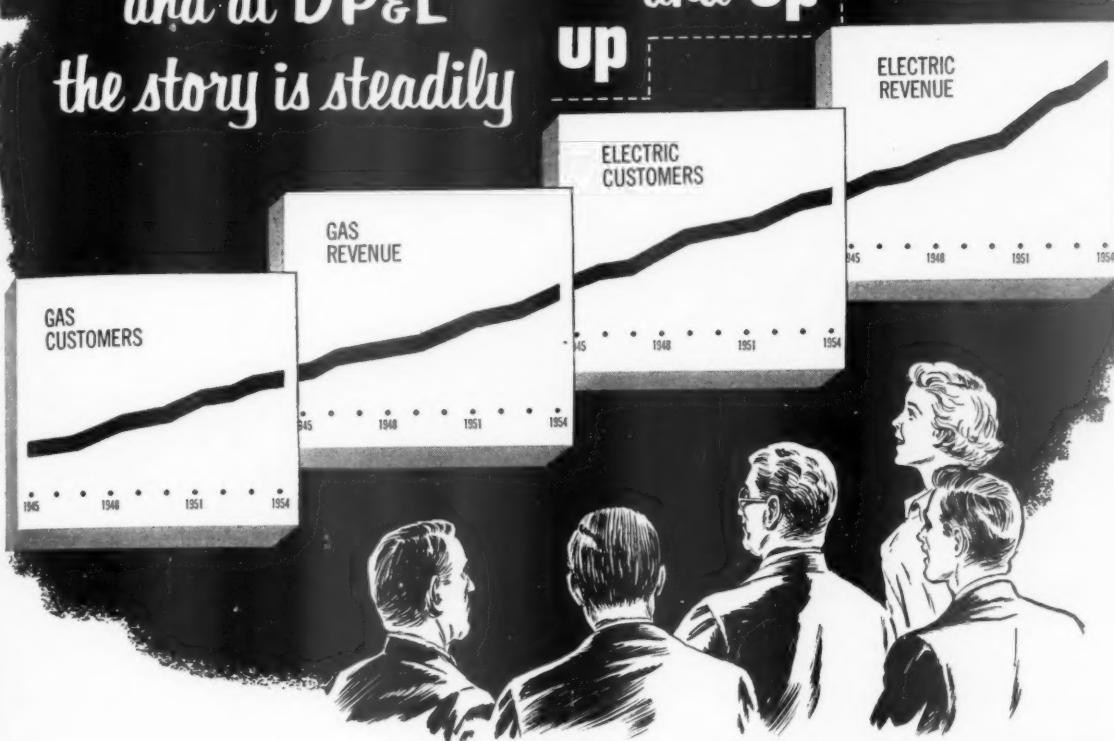
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12, 1955

In West-Central Ohio and at DP&L the story is steadily up and up!



The 1954 annual report of The Dayton Power and Light Company once again records new highs in every phase of the company's operation. West-Central area of Ohio has completed another year of record-breaking new home construction. In addition, the restrictions on the use of natural gas for space heating were lifted. And DP&L put on some of its most successful promotion efforts.

DP&L serves an area where business is on its toes . . . well-paid employees are buying new homes, and the individual use of our services is well above the national average.

This company has been in the fortunate position to take advantage of these opportunities. We are confident that in 1955 this prosperous and progressive area will continue to increase the demand for our services.

We've condensed our 1954 annual report into a "capsule" shown in the chart on the right. We would like to send you a copy of the full report. Just write—



THE DAYTON POWER AND LIGHT COMPANY

BALANCE SHEET

December 31

	1954	1953*
ASSETS		
Property and plant	\$193,188,000	\$184,096,000
Current assets	22,739,000	14,449,000
Other assets	570,000	1,278,000
	\$216,497,000	\$199,823,000
LIABILITIES		
Capitalization	\$166,397,000	\$149,232,000
Current liabilities	15,161,000	18,845,000
Reserves	34,939,000	31,746,000
	\$216,497,000	\$199,823,000

RESULTS OF OPERATIONS

1954 1953*

REVENUE	\$ 61,547,000	\$ 57,501,000
EXPENSES	50,915,000	47,523,000
Gross income	\$ 10,632,000	\$ 9,978,000
INCOME DEDUCTIONS	2,193,000	1,828,000
PREFERRED DIVIDENDS	\$ 8,439,000	\$ 8,150,000
Earnings on common stock	949,000	949,000
Number of common shares outstanding at December 31	7,490,000	7,201,000
Earnings per common share outstanding	\$ 2.88	2.78*

*Restated to include settlement of purchased gas rate increases and federal income taxes

THE DAYTON

POWER AND LIGHT COMPANY

25 North Main Street • Dayton 1, Ohio





EYE SHOCK

EYE COMFORT



Reduce Brightness Contrasts Change Eye Shock to Eye Comfort

Eye shock in business is a modified form of eye shock experienced in night driving. There's one difference—eye shock in business is often present 8 hours a day, while night-driving eye shock is intermittent.

Eye comfort is of first importance

in the design of Day-Brite Luvex lighting fixtures. They are engineered to utilize both *upward* and *downward* lighting—to "wash out" the effects of brightness contrasts—to banish discomfort by banishing ceiling gloom. This results in a bonus in morale and efficiency.

LUVEX

The fixture designed for eye comfort

This outstanding fixture provides maximum "see-ability"—and eye comfort—by reducing brightness contrasts. It finds widespread use wherever there's a need for lighting—stores, offices, showrooms, hospitals, schools, libraries.

Because so much depends on light—SEE, EXAMINE, COMPARE Day-Brite fixtures before you buy. Their many superiorities are apparent.

5430

Call Your DAY-BRITE Representative

Or write—Day-Brite Lighting, Inc.,
5474 Bulwer Ave., St. Louis 7, Missouri.

In Canada: Amalgamated Electric Corp.,
Ltd., Toronto 6, Ontario.

Nation's Largest Manufacturer of Commercial and Industrial Lighting Equipment



holders' meeting would be called to increase authorized stock, the stock would be used to pay dividends, and the purpose of the stock dividend was to conserve cash for use in exploratory work, McCormick said.

• "Amazing" Leap—What happened next morning, McCormick said, was "just simply amazing . . . the transaction was opened on 357,000 shares at 8 $\frac{1}{2}$. The close the previous Friday had been 6 $\frac{1}{4}$." The stock was allowed to open at 12:15 p.m.—two hours and 15 minutes late—while exchange officials tried to match buy and sell tickets—their standard practice when an avalanche of orders is waiting at the start of trading (BW—Feb. 5 '55, p31).

Without stabilizing action, McCormick said, it could have opened at 15 that day, although after the opening "it never touched 8 $\frac{1}{2}$ again."

Biggest stabilizer was the floor committee's decision to let its floor specialist in Pantepec, David Jackson, sell 123,000 shares "short"—in other words, sell stock he did not own. As it turned out, Jackson bought it back on the decline and wound up making \$50,000. But McCormick said Jackson "would just as soon have stayed home Monday morning" because he would have taken a bad financial beating if the stock had gone on up.

• Investigation On—Douglas pointed out that "profits in this incident were made . . . presumably by those who had been buying during the prior week and who then had a chance to unload on Monday." McCormick agreed, noting that 170,000 shares were traded in the preceding week, compared with an average of about 20,000. SEC is now investigating to see who bought and who sold, but McCormick said so far as he knows there were no large blocks in the prior week's transactions and the sales, at first glance, appeared to be "well scattered across the country."

The same specialist, Jackson, lost \$100,000 in two hours one morning in 1954 when he had to move in to help fix "an appropriate opening" on Canada Southern Oil, which also reacted sharply to a Winchell tip.

McCormick agreed with Fulbright that the Pantepec incident would have been much more serious for the Monday buyers if the exchange had allowed an opening at 15. But McCormick said, "So far as I know there was nothing wrong with [Winchell's] facts."

• Another "Tip"—Fulbright also mentioned Amurex Oil, another of Winchell's tips, which went up sharply on a delayed opening last Apr. 27, then tailed off and lost \$2,125,000 in stock value within a 90-minute period.

The committee may call Winchell later. McCormick said broadcast tips are "one of my biggest headaches" and "they're not in the public interest."

NEW DEPARTURES OF TOMORROW



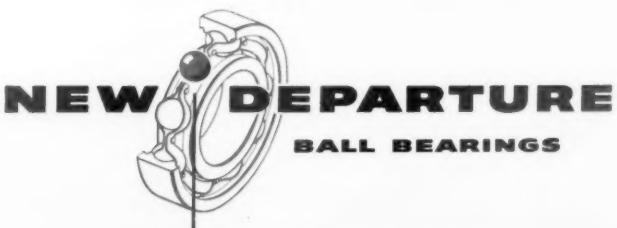
Versatile, easy-to-operate machines that take the backache out of "ironing day" are a housewife's dream come true. And manufacturer after manufacturer has called on New Departure for its ball bearings.

It could well be that in less than a decade a compact new appliance for the home will clean and press a suit, coat or dress in seconds.

Of course, such a machine is yet to be developed. But one solid fact: when the "Valet-mat" does arrive, it will probably be New Departure ball bearings that keep it operating smoothly and efficiently.

Today, practically any type of home-service product you can name is New Departure-equipped. So, when your thoughts turn to new departures of tomorrow . . . think of New Departure—the company that makes the great forward strides in ball bearing design and manufacturing.

NEW DEPARTURE • DIVISION OF GENERAL MOTORS • BRISTOL, CONNECTICUT



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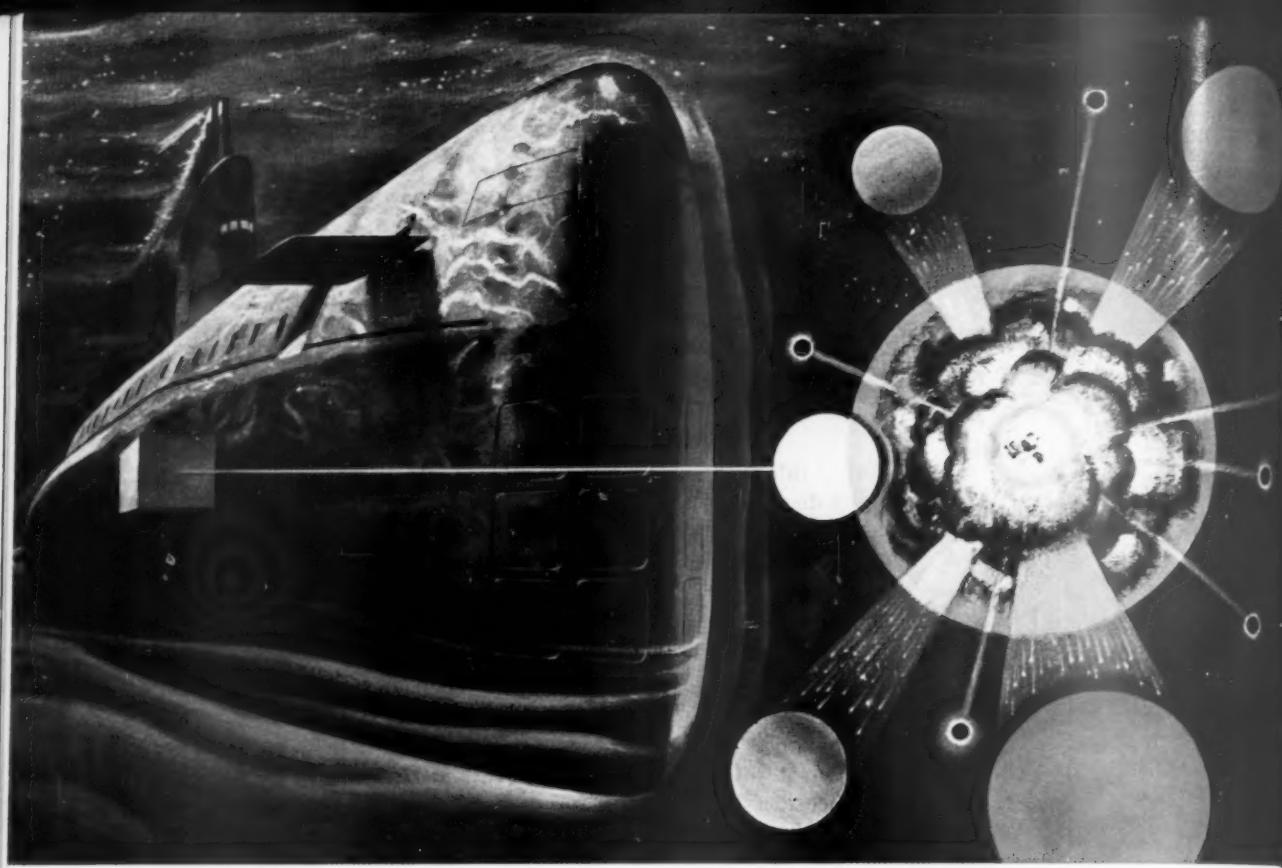
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12, 1955



NUCLEAR ENERGY...

for the enterprising...competitive advantages

Industry's role in the wartime development of nuclear energy projects is paying peacetime dividends.

Alert, far-thinking firms are probing exciting new possibilities for the use of this tremendous new tool as a power source, to combat disease, detect impurities, preserve foods and promote chemical reactions.

This is only the beginning. And to those who take the initiative belongs the competitive advantage.

How can nuclear energy be put to work for you?

The first step — talk to engineers whose experience

qualifies them to advise you. Blaw-Knox engineers have a breadth of experience on a wide variety of Atomic Energy Commission projects, including: engineering design of the world's first Materials Testing Reactor — engineering of the fuel processing plants for atomic bomb projects and the world's first atomic submarines — engineering of ore processing facilities for uranium production.

Blaw-Knox engineering achievements such as these are increasing productivity and lowering costs in major fields of industry. The list of products and services below is indicative of the broad scope of Blaw-Knox activities.

again it's



Engineering, Design and Plant

Construction: Chemical, food, oil, gas and other industries; A.E.C., Chemical Corps, engineers

Castings: Heavy type steel and alloy castings; high alloy for resistance to extremes of temperature, corrosion, abrasion

Process Equipment: Evaporators, dryers, welded pressure vessels and digesters

Grating: Open steel flooring

Rolls and Rolling Mills, for Steel

and Other Metals: Rolling mills, mill drives, shears, special equipment; rolls; open hearth equipment, including water cooled furnace doors, frames, reversing valves, dolomite machines and other auxiliaries

Piping and Sprinkler Systems: Pressure piping and automatic fire protection systems for chemical and power plants, steel mills, oil refineries and for process industries generally

Construction Equipment: Road building black-top and concrete pavers, spreaders, finishers, subgraders, rollers, truck-mixers, road rails and aggregate concrete mixing equipment; heavy forms (for subways, tunnels, dams); clamshell buckets

Towers: Radio, television, microwave, power transmission

Ordnance: Anti-aircraft gun mounts; armor castings for tanks

BLAW-KNOX COMPANY

2104 Farmers Bank Building / Pittsburgh 22, Penna.

PERSONAL BUSINESS

BUSINESS WEEK
MAR. 12, 1955



If your blood pressure starts climbing, you can gain some initial—and beneficial—reassurance from this fact: A regimen worked out by your physician to your individual requirements will usually restore it to fairly harmless levels.

Hypertension (blood pressure above the recognized normal limits) is a serious but not uncontrollable condition. Effectiveness of medical treatment has improved greatly in recent years. Diagnostic methods are more precise; potent drugs can be given with less danger of side reactions.

One important thing to keep in mind is that hypertension is more of a symptom than a disease—a sign that you need to make some changes in your habits, both physical and mental.

The real threat of high blood pressure is leaving it unchecked. Serious complications in the heart, brain, kidneys, and eyes can result from prolonged hypertension. Careful direction by your physician now can prevent such developments later.

What happens when your blood pressure goes up is this. The tiny arteries (arterioles) at the ends of the arterial system are offering an increased resistance to the flow of blood through them from the heart to various parts of the body. The more they are narrowed or constricted, the higher the blood pressure.

In a small percentage of cases, this is brought about by definite kidney diseases or clearly discernible changes in the elasticity of the blood vessels.

Much more often, the cause is not physical breakdown but a reaction to the strains and stresses an individual builds up within himself by a way of life too fast and furious for his constitution. For this reason hypertension is sometimes called a "disease of prosperity."

Although there is no particular "hypertensive type," men and women who tend to feel chronically excited, nervous, or emotionally upset are likely candidates. Many patients with hypertension are tense, conscientious, hard-working people who worry excessively.

Physicians keep in mind, too, the medical histories of patients' parents. Heredity plays an important part in the likelihood of your developing high blood pressure.

Taking all these factors into consideration—physical condition, temperament, heredity—successful treatment is a complicated and individual matter. In other words, what worked for your neighbor will not necessarily work for you. At the beginning, some trial and error may be necessary until the correct combination of therapies is figured out for your individual case.

Then, too, treatment may require a drastic change in your mental attitude. This is because most cases of high blood pressure fall in the category of "essential" hypertension: The cause can be traced to no apparent physical ailment.

In many cases your doctor can't tell just what has brought on your high blood pressure. But he has many tools at his disposal to help bring it down: special diets, drugs, psychotherapy, and (rarely) surgery.

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

MAR. 12, 1955

However, it's up to you to follow, to the letter, the regimen he sets up for you. You'll have to accept the fact that treatment is usually a long-drawn-out process that involves changes in certain attitudes and habits of a lifetime.

Regular medical checkups will catch any development of a tendency toward hypertension. And certain basic measures apply to practically all hypertensive patients.

- Reduce the excess weight that places an extra load on an already over-worked heart.
 - Take things easy—physically, mentally, and emotionally.
 - Moderation should govern the use of tobacco, alcohol, and the amount of salt in your diet.
-

There's no time to waste if you're planning to send a son or daughter to Europe during their summer holidays. Even now, it may be too late to get them in on the average-priced commercial tours or luxury-liner accommodations.

However, space is still available on specially chartered student ships and within organized student groups. And, you'll find a great variety in types of tours to choose from: straight travel programs, work projects in one locale, summer study courses at a foreign university, or combination travel-study groups.

Note that summer study courses such as those arranged by the Institute of International Education are not tourist programs.

They are designed for the student whose purpose in traveling is to discover what a foreign university can contribute to his chosen field and to meet foreign students with similar interests.

When you and your kids are planning the trip, keep in mind that buying a European tour is like making any other investment: It's necessary to shop around and check details. A school or college adviser can probably give you an initial steer in the right direction. The Council on Student Travel, 179 Broadway, New York, N. Y., is a good central source for overall information.

—•—

Seven Toscanini recordings have been released by RCA Victor. Five were taped from actual broadcasts—the Verdi Te Deum, Boito Mefistofele, Act Two from Gluck's Orfeo and Eurydice, and the Mendelssohn Italian and Reformation Symphonies.

The other two were recorded at Carnegie Hall—Debussy's La Mer (this is a re-release with better sound due to improved transfer techniques); and a new recording of Iberia.

—•—

Over 40,000 deaths or injuries to children under five are caused annually by home electrical accidents, according to the American Mutual Liability Insurance Co.'s Institute for Safer Living.

Preventive measures: (1) Cover open-type baseboard outlets; (2) replace cords with exposed wires or loose plug connections; (3) disconnect appliances immediately after use; (4) conceal or cover extension cords placed on the floor. As an extra precaution, parents should know how to give artificial respiration.



Helping Florida Create the Right "Climate" for New Industry

Here's How the Florida Power & Light Company is Providing for Industrial Growth

They come to vacation—and they stay to build! Florida's tourist business, now passing the billion dollar mark annually, sets the pace for its rapidly expanding industrial growth. The number of manufacturing plants has jumped from 2800 to 4000 in seven years. Current ten-year growth rate in population is 72 per cent.

To supply the skyrocketing demand for home and industrial electric service, Florida Power & Light Company, the State's largest utility, is now in the third year of a \$410 million construction program—has tripled its capability since 1945.

More and more of the modern equipment required for this expansion of generating and distribution facilities is supplied by Allis-Chalmers. Not only here but all over the country, Allis-Chalmers helps build for the expanding future by supplying major electric power equipment—practically any component from a massive steam turbine to the familiar distribution transformer.

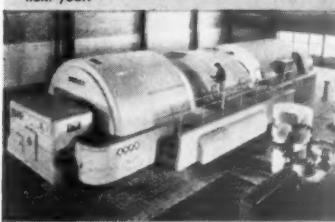


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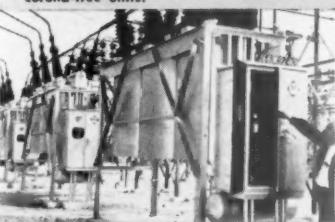
Shown above, Cutler Power Plant, near Miami, already produces more power than FP&L's entire system in 1945—will total 380,000 KW next year.



Allis-Chalmers STEAM TURBINES are basic to utility expansion. FP&L's new Allis-Chalmers unit at Palatka, similar to the one above, will triple that plant's capability.



POWER TRANSFORMERS, above, bring power to Miami substations. Allis-Chalmers leads the industry in development of corona-free units.



CIRCUIT BREAKERS, above, installed at the modern Cutler plant, control electric power and provide system protection to prevent interruptions in service.

IT'S FELT TIP WRITES ON EVERYTHING



in **BOLD** or fine lines

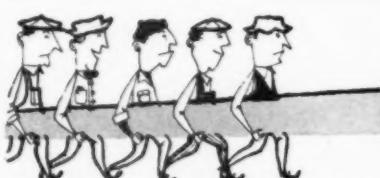
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BUSINESS WEEK.

CHARTS OF THE WEEK

Rubber Consumption

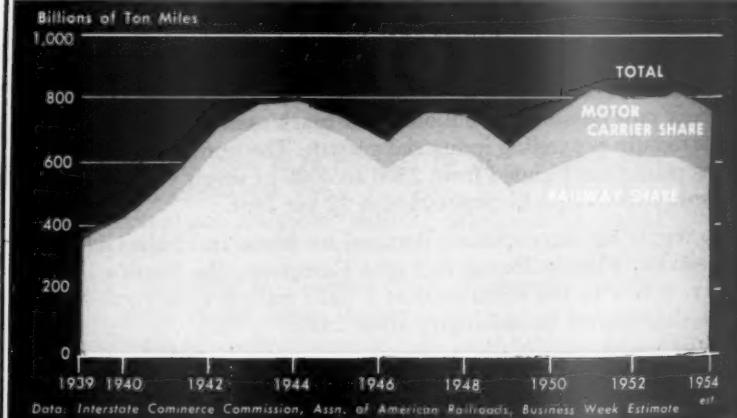


Stepped Up With the Autos

In line with its upward trend over the last five months, U.S. rubber consumption started the year with a rush. Only in March and April, 1953, was rubber consumption greater than it was last January.

Much of the new surge in demand comes from stepped-up auto production. Industry people say this demand is being met now, and there's no fear of shortage. By yearend, consumption may total more than 1.3-million tons.

Who Totes the Nation's Freight



Truckers' Share Increases

Railroads still haul a substantial part of the nation's freight, but the figures indicate that truckers are making heavy inroads. In 1953 (for which figures have

just been released), truck ton-miles increased 12.3% over 1952, while railroads declined 1.5%. In 1953, railroads carried almost three times as many ton-

REEVES



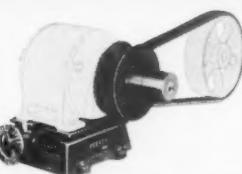
MOTODRIVE combines motor, speed varying mechanism and reduction gears in single, compact unit. Speed variations 2:1 to 6:1. Sizes to 40 hp. Also available in fractional sizes with 10:1 ratio.

...the only complete line



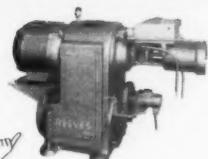
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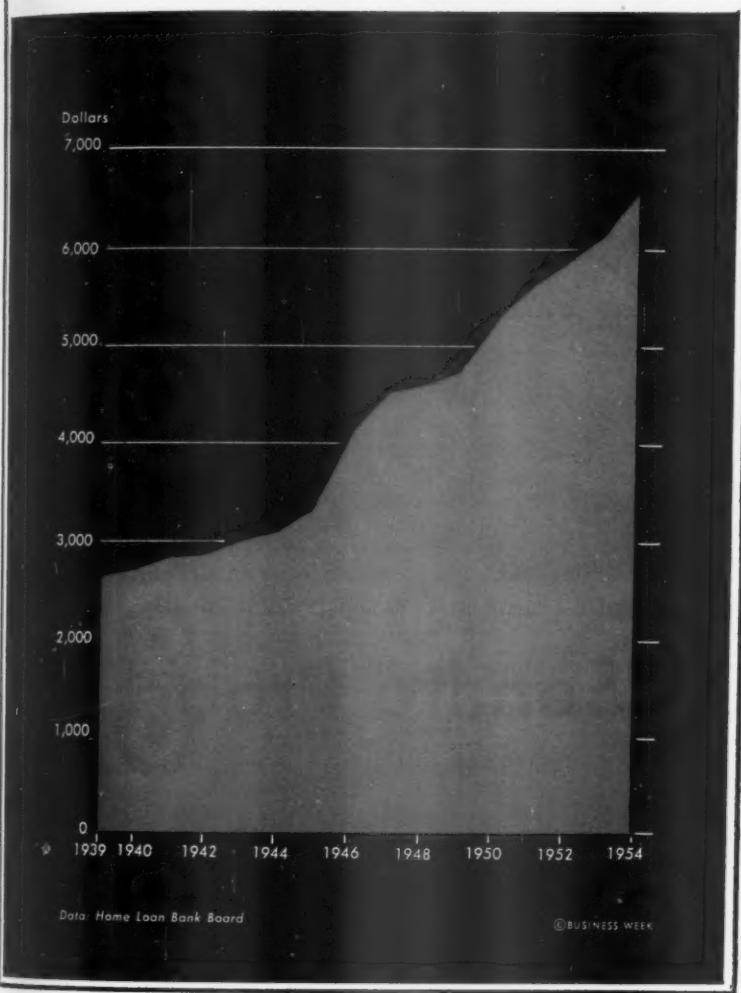
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Average Mortgage Loan



Growing Along With the Family

Last year, the average mortgage loan in the \$20,000-and-under group was \$6,644. That's a 6.5% increase over 1953, and a 40% jump over 1949's figure of \$4,755, according to the Home Loan Bank Board. Between 1939 and 1954, the average loan has increased almost 1½ times.

While increased construction costs are a factor, the primary reason for this

phenomenal rise probably is the trend toward larger houses today than in the immediate postwar period. According to a Labor Dept. survey, the average house built last year was 5% larger than that built in 1951. This represents the need for accommodations for today's larger families—many of which have now outgrown the two-bedroom home (BW—Jan. 22'55, p25).

GOVERNMENT



SEN. FULBRIGHT and aides, led by staff director Robert A. Wallace (seated, left of Fulbright), plow through pile of data in . . .

Tooling Up for Senate Probe

Congress annually earmarks from \$1-million to \$3-million to probe subjects ranging from the cost of a cup of coffee to the long-term prospects for economic growth. For that kind of money you can buy a lot of fact-finding—or a lot of headlines. And you can make the Congressional investigation an important force in the life of the nation.

This week, the Senate Banking & Currency Committee, under Chmn. J. William Fulbright, (cover and above) is digging into its \$50,000 budget to probe the gyrations of the stock market (page 170).

By recent standards, Fulbright's study of the market is an inexpensive investigation.

Some of the full-time probers—such as the investigations subcommittee of the Senate Government Operations Committee—have larger staffs and spend more money than their parent bodies. Most of the money voted for these in-

vestigations—like the \$260,000 asked by the Senate Internal Security Subcommittee—goes to pay the salaries of staff members—the lawyers, the investigators, the clerks—for witness fees, for travel, and for telephones, telegrams, and stationery.

• **Genesis**—How do investigations get started? How many wheels have to turn before probes like the Kefauver crime committee flash the reluctant hands of a Frank Costello across your television screen?

A couple of sentences about card-carrying Communists in the State Dept. in a Lincoln Day speech by Sen. Joseph McCarthy in Wheeling, W. Va., in 1950, set off a whole chain of investigations that cost well over \$1-million.

A letter from a constituent about waste around military installations sent Harry S. Truman then a senator, scurrying around Missouri for a personal looksee. He came back to Washington to convince the Senate that it should estab-

lish a special national defense investigation committee.

• **A Blueprint**—The preparations leading up to last week's opening of the financial luminary-studded hearings in the spacious Senate caucus room provide a blueprint on how to set up a Congressional investigation.

Here's how the stock market hearings came about, including a measure of what it takes to get a major investigation rolling.

I. How It Crystallized

Shortly after the Federal Reserve Board boosted margin requirements on Jan. 4, a news reporter asked Sen. Fulbright what his committee might concern itself with this session.

"Do you think the stock market needs looking into?" the reporter asked.

"It probably does," the new chairman casually replied.

Thus was the stock market study

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"It is not an investigation of criminals, neither do we expect to uncover violations of any kind."

STORY starts on p. 184

crystallized in Fulbright's mind. He had given prior thought to it. As soon as it became obvious to the 49-year-old junior senator from Arkansas that he would become Banking chairman he began studying what the committee should turn its attention to.

• **Price of Broilers**—“The gyrations of the market reminded me that it came within the jurisdiction of the committee,” said the former Rhodes Scholar and college president. “I was particularly concerned about the high level of the market and the low level of agriculture. Broilers hit a new low in my county—16¢ a pound—the same time the stock market was hitting a new high.”

Discussions with other committee members convinced Fulbright that the committee had an “overseen” responsibility that justified a scrutiny of the market. But it was the publication of his casual comment that crystallized the decision to go ahead.

Meanwhile, during much of November and December, Fulbright was serving as a delegate to the U.N. General Assembly in New York. This kept him away from committee work. Working through John H. Yingling, his administrative assistant and now clerk of the Banking Committee, Fulbright narrowed the field of 30 applicants for the post of staff director. By Dec. 15 Robert Ash Wallace, 33-year-old legislative assistant to Sen. Paul Douglas of Illinois, had been tentatively approved—subject to committee action.

What nailed down the job for Wallace, a political science major, was his wide range of legislative experience with Douglas. While Wallace had no specialized training within the purview of the committee, his broad general knowledge—he was a structural engineer with

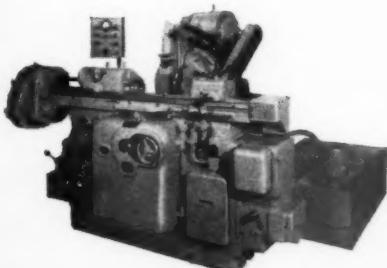


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criminals,
violations

on p. 184

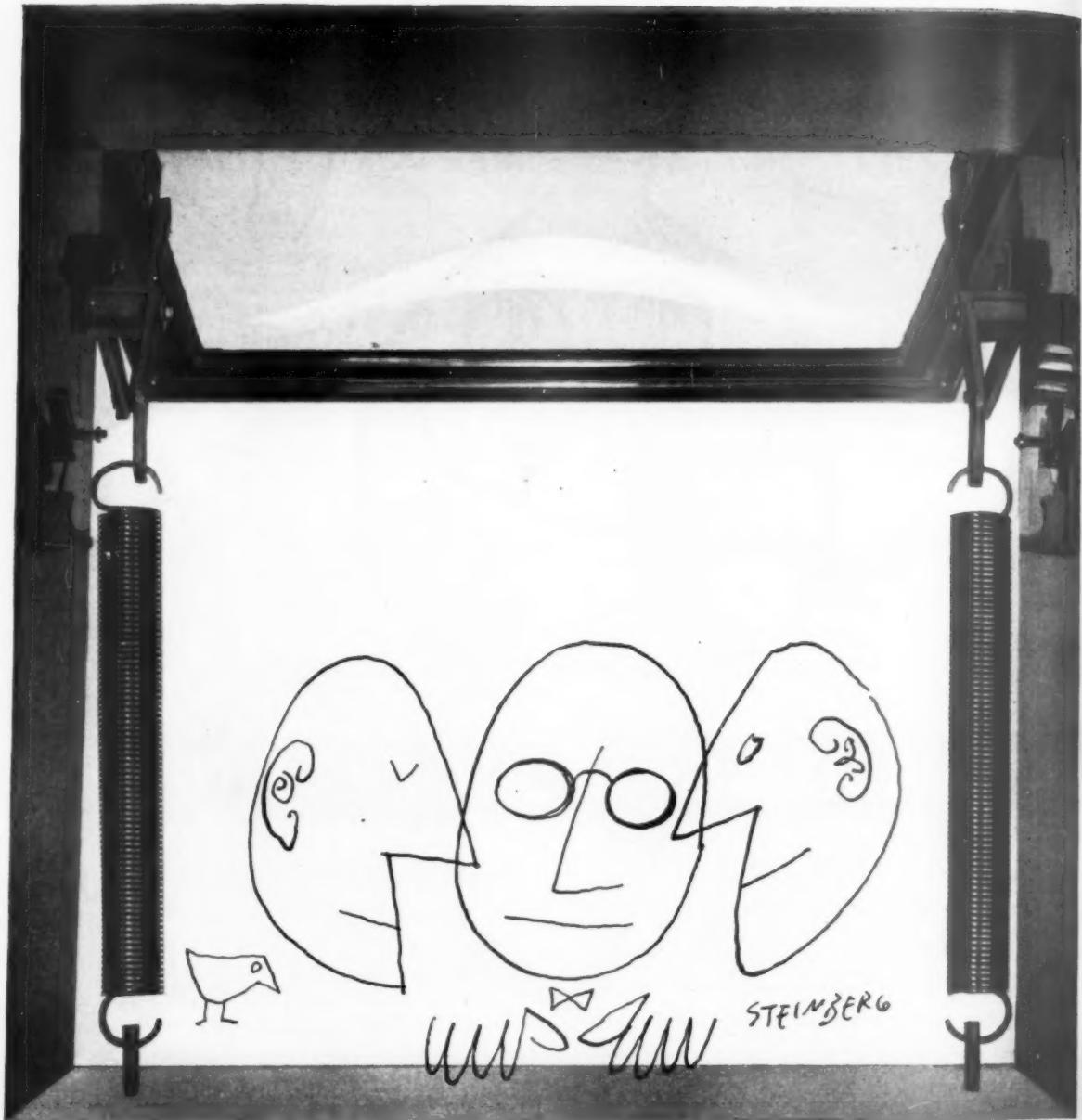
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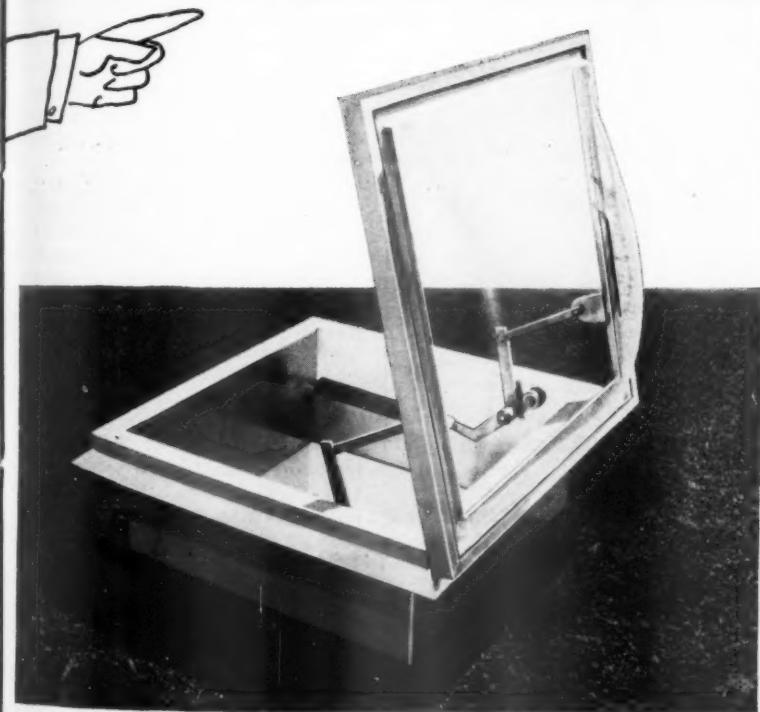


Architect, Builder and Client, Pondering
The Problems of Daylighting Plus Fire Protection,
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PYRODOME admits daylight through its Wascolite acrylic dome... gives you even, balanced daylighting and cuts illumination costs. PYRODOME is inexpensive, easy to install. Also available, the WASCO PYROVENT with solid aluminum cover for venting only. Write for illustrated catalog.

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"We hope it will help the people who run the stock market to avoid the pitfalls—whatever they are."

STORY starts on p. 184

Boeing during World War II—plus his familiarity with the committee's work impressed members.

Fulbright broached his plan for the study at the organizational meeting of the committee shortly after Congress convened. Once Fulbright made it clear what he wanted to do—conduct an educational excursion—the committee voted approval.

• A "Study"—At the same meeting, Fulbright got a committee O.K. on Wallace as staff director. It also was decided at that meeting that Wallace should handle the study. The reason a lawyer was not brought in to conduct the hearings, as is usually the case, was that such a choice would have stamped it as an "investigation."

"It is not an investigation of criminals and neither do we expect to uncover violations of any kind," Fulbright points out in clarifying why he insists on identifying it as a "study."

"We hope it will help the people who run the stock market to avoid the pitfalls," he says, adding with a grin, "whatever they are."

Once the committee decided to conduct the study, it was necessary to go before the Rules Committee to request funds. The \$50,000 ticketed for the stock market hearings was covered in a \$100,000 request for all Banking Committee investigative work, which the Senate readily approved.

II. Fast Education

By this time Wallace was hard at it, working up an outline of material to be considered in the hearings.

Wallace set about learning as much as he could about the market in a hurry. First, he talked to William H.

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"I was particularly concerned about market gyrations . . . broilers hit a new low in my county the same time the market hit a new high."

STORY starts on p. 18

Moore, an economist on the staff of the Joint Economic Committee, about factors in the recent stock market rise. Moore recommended two background books: "The Stock Market" by Charles A. Dice and Walford J. Eiteman (McGraw-Hill), and a textbook on corporate finance.

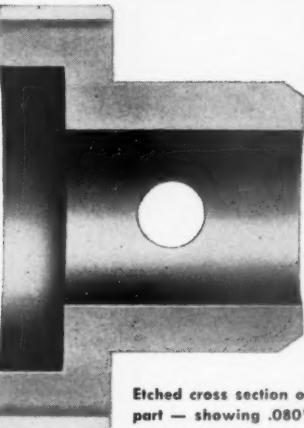
Next, he and Moore talked to Harold C. Patterson, director of the Div. of Trading & Exchanges at the Securities & Exchange Commission. Patterson and his statistical experts brought out charts and data on price movements, charts showing the number of stocks still selling below 1946 levels, and regulations now in effect.

Wallace then made a stop at the Federal Reserve Board where he talked with Ralph A. Young, director of the division of research and statistics. Young brought in Winfield W. Rieffel, assistant to the chairman, and Alfred K. Cherry, legislative counsel, and they discussed general market stability, margin requirements, the volume of credit in the market, and the relative effects of business conditions on the stock market.

• **Pause to Digest**—At that point the husky Wallace, who is six feet three and weighs 210, had to pause to digest the information he collected. Then he plunged into his reading and research. From that came an outline of the material he thought should be covered in the hearings.

About that time G. Keith Funston, president of the New York Stock Exchange came to Washington and had a four-hour talk with Wallace and Moore. They ranged over statistics on the activity and trends in public transactions, covering speculation, comparisons on price-earnings ratios and on compara-

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Etched cross section of part — showing .080" hardened depth.

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External Grind	0.0166
	\$0.1014
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tive yields on stocks and bonds, and operation of the exchanges.

III. Gathering the Staff

A day or two later—on Jan. 15—the Senate Banking Committee confirmed Wallace and he began assembling a staff.

On Jan. 17, SEC made two of its securities specialists available to him as his first staff members: Myer Feldman, an attorney specializing in laws relating to securities; and Amerst E. Huson, a financial analyst.

The three showed their outline of the study to people in Washington agencies for comment. Then they headed for New York and spent a morning at the New York Stock Exchange discussing with Funston and his staff the material that might be supplied the committee by the exchange.

They lunched with Winthrop H. Smith, a managing partner of Memill Lynch, Pierce, Fenner & Beane; Henry Harris, of Harris, Upham & Co.; and Dean Courtney Brown, of Columbia University. Wallace outlined for them the proposed plan of study.

"I think," says Wallace "that we succeeded in convincing them that it wouldn't be a witch hunt."

Wallace returned to Washington and hired Asher Achinstein, a business cycles expert from the Legislative Reference Service, which helps congressmen draft legislation; Miss Nancy Platt, an attorney, as research assistant; and a couple of secretaries to round out his staff. The \$50,000 budget, which had to cover expenses as well as salaries, dictated a small staff.

Wallace set up shop for his team in a basement room of the Senate Office Building.

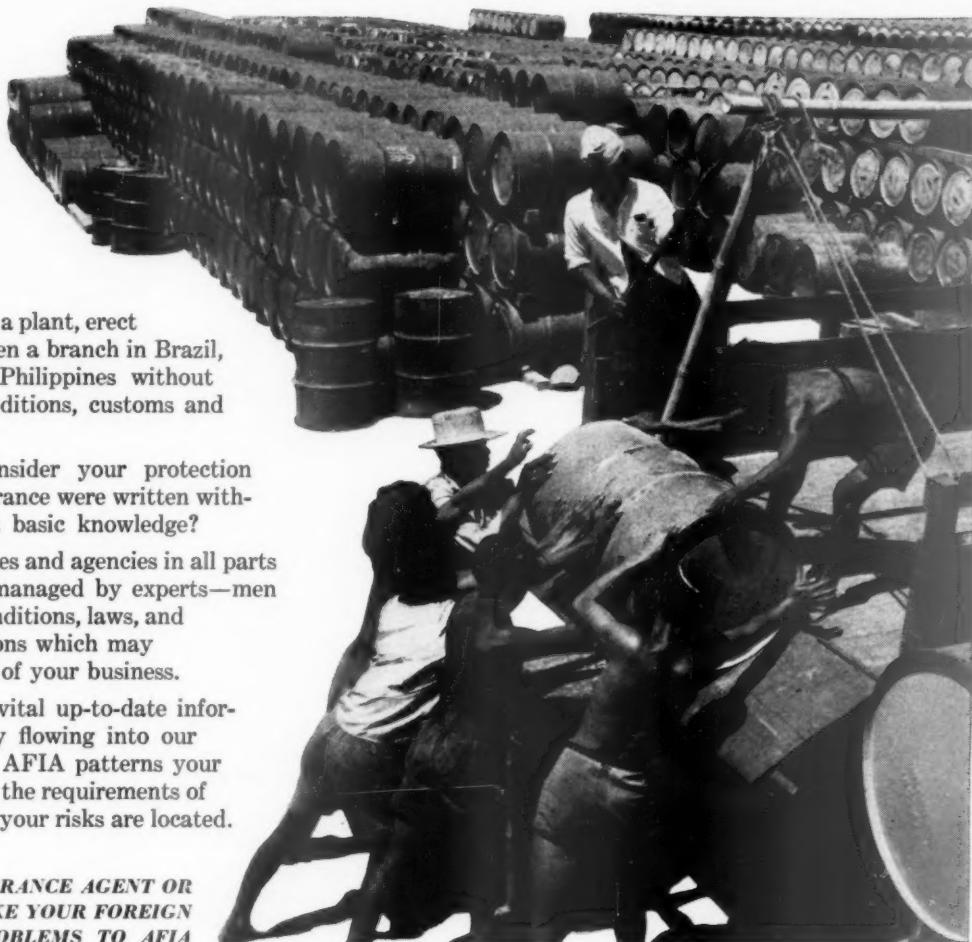
• Quizzing the Specialists—There the staff began drafting a questionnaire. It decided to include economists in the mailing of the nine-question queries sent to 5,000 broker-dealers, bankers, investment houses, and market analysts.

In periodic sessions, Fulbright contributed considerable direction to the study, but there was little active participation by other committee members.

Huson and Achinstein went back to New York to talk to more bankers and investment people. Meanwhile, Wallace dug into data that was to provide reference material for committee members in questioning witnesses. Some was to be original work by staff members, supplemented by material supplied by the exchanges and agencies.

The material, which covers 11 chapters and originally ran 500 pages is to be published by the Government Printing Office and may well become "must" reading on the market. But to have copies ready on the desk of each committee member on Mar. 3, when

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Chmn. Fulbright gaveled the hearings to order, Wallace worked his staff seven days a week, often until midnight.

IV. Witnesses and Rules

During this time, Fulbright and Wallace also worked on a witness list. They started out with a list of 150 prospects but finally decided to call only one financial writer and to limit other witnesses to one each from each specialized field of market operations. During the course of hearings they may add witnesses to represent labor, agriculture, general economists, and small investors to give more depth to the study.

In selecting the blue chip witness list they chose:

• Harold E. Wood, chairman of the National Assn. of Securities Dealers, because of his knowledge of over-the-counter operations.

• Prof. John K. Galbraith, Harvard economics teacher, because he had made a study of the 1928-29 market.

• Benjamin Graham, chairman of Graham-Newman Corp., because he is an expert on investment analysis.

• Benjamin Fairless, chairman of U.S. Steel Corp., because of his knowledge of employee stock option plans and his company's experience with financing expansion in the steel industry.

• Pres. Harlow H. Curtice, and others of General Motors, because that company's recent stock issue of \$225-million is the biggest equity financing in history.

On the Monday before the hearings began, the entire committee met to set ground rules for the hearings.

• Back-Stoppers—The decision was that the committee members should do the major questioning, with the staff back-stopping them. The ground rules call for each witness to submit a statement in advance, to give only a summary statement before the committee and then to submit to questioning. Questioning time will be limited to 10 minutes for each member.

To aid the senators, the staff members prepared suggested questions, based on an analysis of advance statements of the witnesses. That, plus the manual prepared by the staff, was calculated to make the senators knowledgeable on the subject, despite their lack of contact during the planning stages.

And as Chmn. Fulbright pointed out: "Two of the committee members (Senators Prescott Bush of Conn. and Herbert Lehman of New York) have wide experience in investment firms and are well prepared to ask questions on their own."

However, as the hearings got under way last week, it became obvious that lack of first-hand market experience would deter few members from putting in their ten minutes' worth.

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Boiling-Point Economics

A prescription for permanent prosperity has been concocted for the Conference on Economic Progress by Leon Keyserling, chairman of the Council of Economic Advisers during the Truman Administration. In presenting his program, Keyserling is sharply critical of the Eisenhower Administration for dangerous complacency in considering a 3% rise in total output this year as satisfactory. This increase, he states, is tantamount to stagnation. He wants at least a 6% rise this year.

The Keyserling program calls for a \$200 rise in personal income tax exemptions, which would provide about \$4.5-billion in increased purchasing power. At the same time, he wants a big rise in government spending, principally for public works, defense, and foreign aid. Unless such a massive program is followed, he warns that unemployment will show a big rise.

This method of producing prosperity is consistent with the questionable notion that a locomotive is standing still if it is not racing under full steam. Keyserling does not believe there is any progress in a moderate rate of advance. He plans, at all times, to keep our economic boilers heated to the bursting point.

But there is no assurance that such a method would in fact produce prosperity. Nobody wants to create unemployment. Yet there is real doubt that Keyserling's plan to eradicate unemployment would be successful. It is calculated to result not in full employment, which is what we now enjoy, but in hyper-employment, where there are more jobs than people.

Under Keyserling's prescription, the economy would have no slack or play in it. Without this safety valve, we would be robbed of the essential flexibility that is the hallmark of a free—and expanding—economy. Such a condition would not mean permanent prosperity but perpetual inflation.

We do not think that anyone should be complacent about the state of our economy—even though it has regained its forward momentum after undergoing an adjustment from the Korean boom. But we do not believe it is necessary to overstimulate an already rising economy and thus bring on a return to inflationary boom conditions. Keeping the economy at boiling point and without a safety valve means that, sooner or later, we would be inviting catastrophe.

Massive Deterrent

In his own unique and masterful fashion, Sir Winston Churchill has outlined Great Britain's position in the H-bomb age. He explained that his government's decision to develop the H-bomb was based on the proposition that the West must be so powerful in nuclear weapons that the Communists will not risk a war.

This "defense through deterrents" is nothing less than the policy of massive retaliation fathered by Secy. of

State Dulles. Churchill, in fact, repeatedly warned Soviet Russia that the British fully support the Dulles doctrine that any attack on the West would mean instant and massive retaliation.

He did not use the word massive, perhaps because Churchill has always had his own way of saying things, but he left no doubt that is what he meant in stating "it is essential to our deterrent policy and our survival to have, with our American allies, the strength and numbers to paralyze these potential Communist assaults in the first few hours of the war, should it come."

These measured words should be heeded by all those in the West who have harbored the notion that Churchill was prepared to avert atomic war through appeasement. Sir Winston exposed criticism of the Dulles doctrine as confused and misguided. Appeasement might bring peace, he pointed out, but "only peace in the form of the subjugation of the free world to the Communist system."

This is an important declaration that clears up, once and for all, the misconceptions and deliberate misinterpretations that many of our allies, particularly the British, have raised about Dulles' formula. Now we find that Churchill has ranged himself beside Dulles in support of massive retaliation.

We welcome this new expression of unity. If the Russians know that any aggressive move will "bring down on them at once a crushing weight of nuclear retaliation," they may recognize the insanity of starting a war. The Dulles-Churchill doctrine of defense through the deterrent of retaliation seems the most effective way of bringing them to their senses.

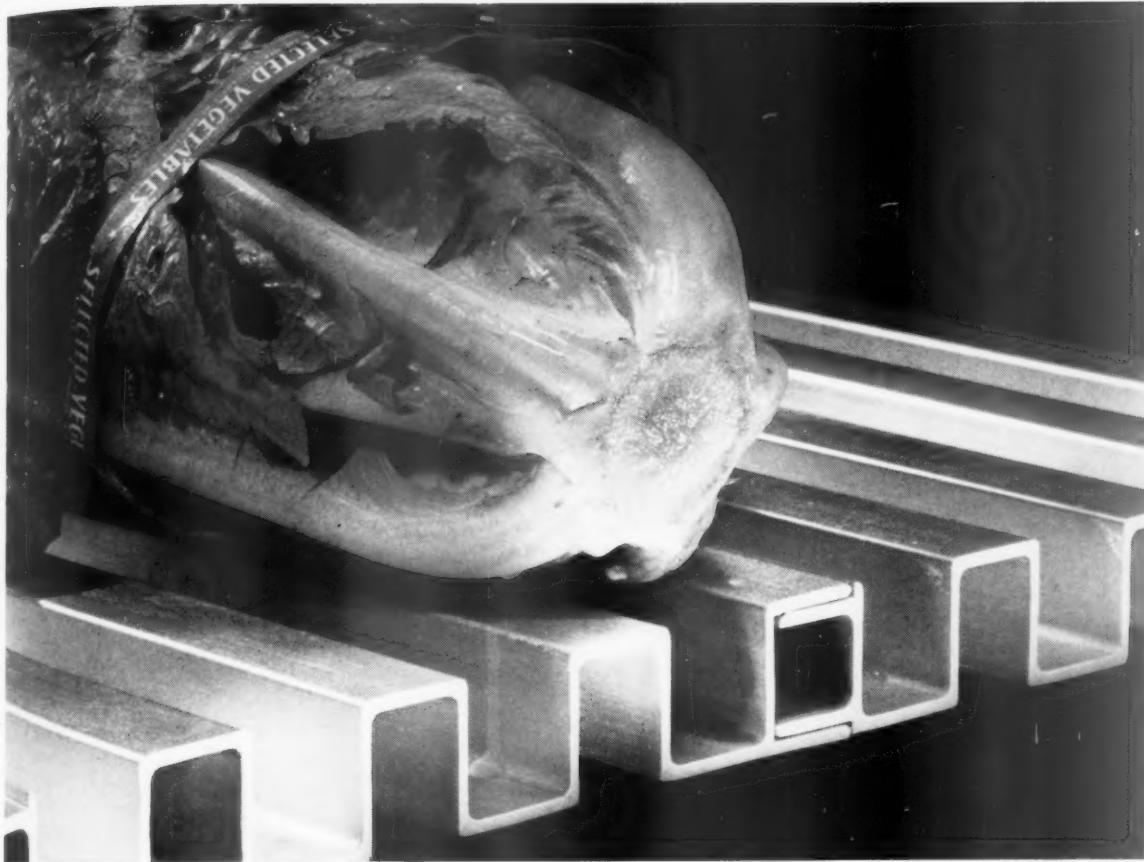
Let's Show the Russians

The suggestion made by the Des Moines Register to have Soviet farmers visit Iowa to get "the lowdown on raising high quality cattle, hogs, sheep, and chickens," has been endorsed by Pres. Eisenhower. He considers that such a visit "would be good, and good only."

We heartily agree. Ways should be found to circumvent the laws preventing Communists from entering the U.S. in order that this particular group could be given access to our farm country.

We have nothing to fear from a Communist visit to inspect corn that grows as high as an elephant's eye and fatted calves by the acre. Far from any guided tour, we think they should be allowed to wander through the farmland and see for themselves that our output is not based on exploitation and forced collectivization, but is mainly due to private initiative.

It seems to us that we can't lose if the Kremlin lets Russian farmers visit us. How are they going to keep them down on the collectives after they've seen Des Moines?

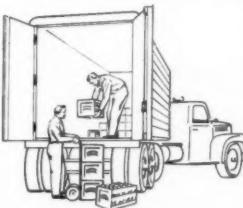


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the general rule when Harvey Aluminum Extrusions become part of design. *Practical imagination*—40 years of it—is yours when you have a Harvey Engineer sit down with your own designers. With us, the "special" problems are everyday problems. A Harvey Engineer will be glad to show you how this principle can work for you. Call or write us today.

Extruded full trailer length and integrally rigid, the floor sections reduce the parts and operations needed in construction. Interlocking sides provide uniform floor pattern, added strength. The floor sections are only one of the many custom-fitted Harvey Aluminum Extrusions used in modern trailer and truck building.



"*Aluminum Extrusions*," Harvey's newest brochure, is yours for the asking. It combines an illustrated story of extrusions, how they're made and used, with a wealth of engineering data.

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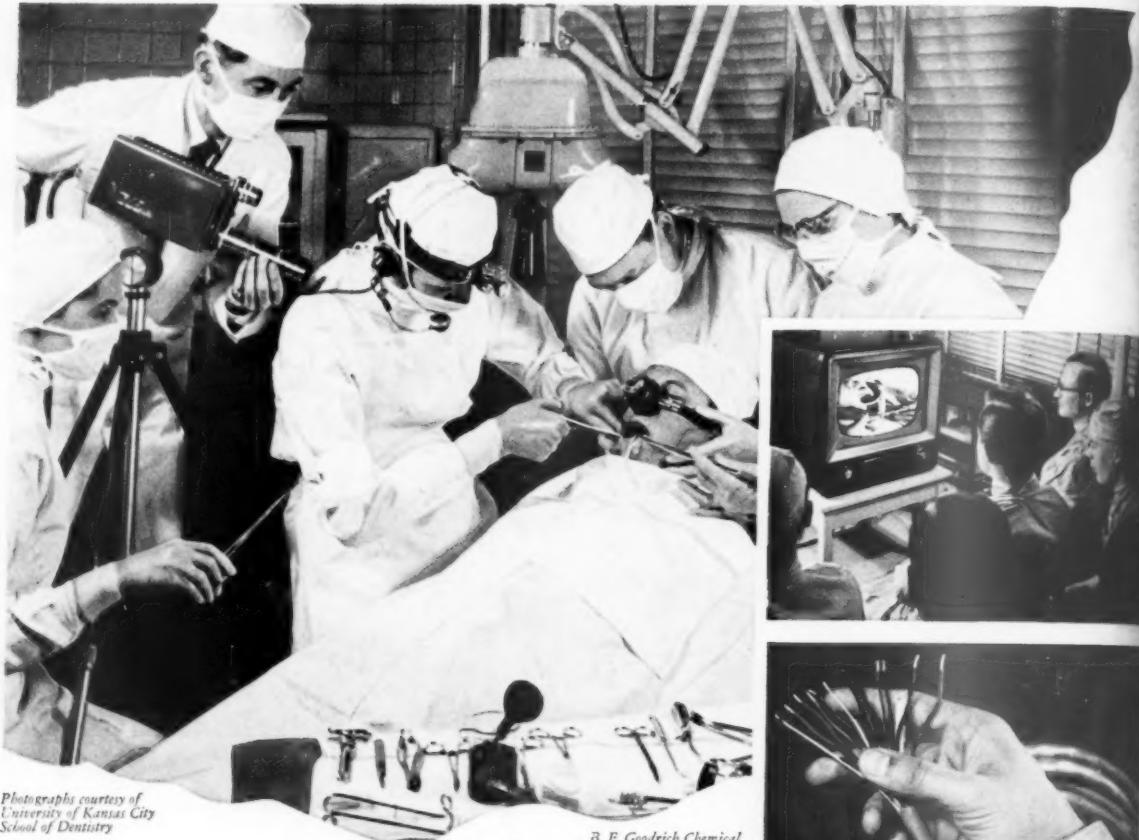
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Another new development using
B. F. Goodrich Chemical *raw materials*



Photographs courtesy of
University of Kansas City
School of Dentistry

B. F. Goodrich Chemical
Company does not make the equipment
shown. We supply only the Geon
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Operation Close-up —Teaching by TV Eye

FORWARD thinking by authorities at a University School of Dentistry solved an old problem—how to enable groups of students to study oral operations close up.

Geon polyvinyl insulating materials play a strong part in this use of closed circuit television. A portable TV camera powered by Geon-jacketed cable focuses on the surgeons while they operate on the patient. Students see clearly every detail on the screen of a TV set. Others see it on a movie screen in another room.

The manufacturer of the TV installation specified Geon materials in this new teaching aid. The cable jacketing must be flexible, resist abrasion, because it is

yanked along the floor and around corners. It must also be oil and grease proof, and resist the harmful action of many chemicals. The colored insulation on the conductors is also made of Geon, making it easy to find the right hook-up in case of trouble.

Versatile Geon is at work in hundreds of industries from electrical to packaging—improving products, processes with its many advantages. New Geon applications are coming to life every day, and the next one may well give a boost to operations in your own plant. Geon is available in many forms—for molding, extruding, dipping, spraying, coating, and other processes. To learn more about

how Geon can fit into your own picture, please write Dept. J-3, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco. In Canada: Kitchener, Ontario.



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